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OLDER WOMEN'S HEALTH

HEARING

BEFORE THE

TASK FORCE ON SOCIAL SECURITY
AND WOMEN

OF THE

SUBCOMMITTEE ON
RETIREMENT INCOME AND EMPLOYMENT

AND THE

SELECT COMMITTEE ON AGING
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

FEBRUARY 5, 1986

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OLDER WOMEN'S HEALTH

WEDNESDAY, FEBRUARY 5, 1986

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON AGING,
TASK FORCE ON SOCIAL SECURITY AND WOMEN,
Washington, DC.

The task force met, pursuant to notice, at 9:55 a.m., in room 340, Cannon House Office Building, Hon. Mary Rose Oakar (chairman of the task force) presiding.

Members present: Representatives Oakar, Manton, Schneider, Bentley, and Meyers.

Staff present: Catherine Straggas, staff director; and Karen Pollitz, professional staff.

OPENING STATEMENT OF CHAIRWOMAN MARY ROSE OAKAR

Ms. OAKAR. The task force will come to order.

First of all, I want to welcome everyone here, and apologize for my lateness. Congress is always filled with emergencies, so I was unavoidably detained.

I want to apologize to my friend and colleague Congresswoman Schneider. At this time, I would like to call on Claudine for opening remarks.

STATEMENT OF REPRESENTATIVE CLAUDINE SCHNEIDER

Mrs. SCHNEIDER. I would like to congratulate you, Madam Chairwoman, for calling this committee together so that we might have the opportunity to look in greater depth at the questions concerning older women and their health care, their accessibility and developing trends and to also hopefully enable us to look at possibilities of how we might take action on the Federal and on the individual level as to how we can promote improved health care through preventive measures.

I will be particularly anxious to hear today about what our witnesses can tell us, not just about the plight of the average white woman, but also some of the statistics that have been accumulated on blacks, Hispanics and Asian women. And I am also curious to know some of the impacts that stress seems to be having on the new lifestyle and the new careers and directions that women seem to be moving.

So I thank you for the foresight in calling this hearing, and I look forward to what our witnesses have to say.

Ms. OAKAR. Thank you very much.

I would like to submit Congresswoman Olympia Snowe's statement for the record at this time, along with that of Representative Bently.

[The prepared statements of Representatives Snowe and Bentley follow:]

PREPARED STATEMENT OF REPRESENTATIVE OLYMPIA J. SNOWE

Madam Chairperson: I applaud your efforts in holding this hearing on the health concerns of older women.

The demographic projections for the year 2000 and beyond are quite clear—they show a continued growth in the older population, particularly for those 85 and older. By definition, this means more older women, because as the population ages, the number of women increases due to differential mortality rates. In fact, at the older ages, where frailty increases, the ratio of women to men is two to one.

Even though the life expectancy for women is longer, women past age 65 have a greater prevalence of multiple, long-term chronic illnesses that cause limitations in lifestyle. And while older women, as all older persons, may develop such conditions as visual and hearing impairments, arthritis, hypertension, coronary and cerebrovascular disease, and other such ailments, the incidence of these illnesses varies widely, as does the degree of impairment. Few diseases are age or gender specific, but many diseases seem to accumulate in later life and some, such as osteoporosis, are the result of conditions that begin much earlier.

Osteoporosis is particularly frustrating because it is essentially preventable. It requires, however, long-term lifestyle changes that include diet and exercise which means a high level of information about this debilitating disease is necessary. In this need for education and information, osteoporosis is like many of the illnesses from which older women typically suffer. For example, in the case of breast cancer, hypertension, visual impairments or such health problems, prevention or maintenance should begin long before the woman reaches advanced age.

I am pleased that today we can explore the issues of prevention, diagnosis and treatment of some of the health problems of older women. By focusing on these issues, we can begin to address the quality of life that should be available to every older women.

STATEMENT OF REPRESENTATIVE HELEN DELICH BENTLEY

Thank you Madam Chairwoman. I commend you for holding this hearing on older women's health concerns and I thank the witnesses for sharing their knowledge on this topic with the Task Force.

It is evident from recent statistics indicating there are 5 million more women than men over age 65, a ratio of nearly 3 to 2, and there are almost 5 women for every 2 men over age 85, that there is a true demand to focus this task force's attention on elderly women's health needs and concerns.

It is a well established fact that women live so much longer than men, yet there is not enough attention being focused on the chronic conditions and illnesses that many of these older women face, such as: osteoporosis, Alzheimer disease, vision impairment, and urinary incontinence.

I would like to pledge my support in bringing about legislation which helps older women become more aware of illnesses to which they may be prone.

Thank you for this time, Chairwomen Oakar.

Ms. OAKAR. For the 18 million elderly women in this Nation, health care is a primary concern. I believe very strongly that it is in many ways the No. 1 concern for older people.

We have heard a lot of reports concerning the fact that elderly people are getting on much better these days. What is very interesting about that statistic, when you talk about 15 percent of the elderly being below poverty and the rest are above poverty, are two things. One is that the greatest percentage of older people happen to be female; and the second thing about that statistic that is very misleading is that the number of people who are near poverty is increasing.

Now, poverty for an older person is below $4,000 annually. Near poverty is from about $4,200 to $6,000 annually. So I think it is very important that people not be fooled by statistics and where people are. I personally wish we didn't have to worry about these issues and we could get on to some other ones; but the fact of it is we know that 42 percent of black elderly women live in poverty and 14 percent of all elderly fall below poverty.

Again, I want to emphasize the fact that the statistics are misleading, because the near poor, that is those who make from $4,200 to $6,000 a year, are the bulk of older Americans and certainly older women.

I have been really concerned about the issue of health care, and I think it is time now to get on to improving Medicare. Since we began Medicare, which is celebrating its 21st anniversary, that the emphasis on Medicare has always been on things that cost a little more, such as hospital care and physician fees. We do not do an awful lot relative to preventive care. In talking to some of the fathers and mothers of Medicare—Wilbur Cohen, who is one of my heroes, who was the HEW Secretary at the time, Wilbur told me that they never really believed that Medicare would remain at its status quo, and that is that it would never just concentrate on hospital care and physicians fees, that it would really reach a spectrum of services, but it was a beginning.

We haven't really improved Medicare since then, and it only covers about 40 to 45 percent of an older person's needs. I have introduced three pieces of legislation that primarily deal with giving seniors other options, and covering some things that are not covered now. In order to get a free blood pressure check, you have to prove you have high blood pressure. We don't give free physicals, but we will pay for long-term hospital care. We don't give women mammograms. We don't give men colon tests free.

That is being penny wise and pound foolish. If we dealt more with comprehensive care, in the long run we would save everyone a lot of money, including the Government.

So I am going to submit my entire statement for the record at this time which details some of the bills that I have introduced and some of my other ideas on the subject.

[The prepared statement of Ms. Oakar follows:]

PREPARED STATEMENT OF REPRESENTATIVE MARY ROSE OAKAR, CHAIR, TASK FORCE ON SOCIAL SECURITY AND OLDER WOMEN, HOUSE SELECT COMMITTEE ON AGING

Good Morning. Thank you all for being here today for this hearing on health issues facing older women.

For the 18 million elderly women in this Nation, health care is a primary concern. As is the case for all elderly Americans, health issues affect older women both personally and financially. Seniors are now spending the same proportion of their income on health care as they did before Medicare existed, and the elderly today need more than twice as much care as do younger families.

Health concerns are even more prevalent for older women because they tend to live longer, they suffer from more chronic conditions, they have fewer financial resources to pay for care, and they are more likely to live alone, without benefit of a family care-giver. Although we have read reports recently about the vastly improved financial status of senior citizens, we should remember that many elderly, and especially elderly women, remain in serious financial straits.

While the average elderly family spends 9 percent of total income on health care, the average elderly woman living alone devotes 16 percent of income for health expenses.

While 14 percent of all elderly fall below the poverty level, 17 percent of elderly women and 42 percent of black elderly women live in poverty.

Furthermore, older women, as a group, are growing in numbers faster than any other segment of our population. By the year 2000—just a few years away—America will have 35 million citizens over the age of 65 and almost 60 percent of those seniors will be women. For seniors over the age of 80, the ratio of women to men is 5 to 2. Consequently, the health problems of advancing years will be the health problems of older women.

I do want to stress that we are speaking of a diverse group of people when we speak of older women and the elderly in general. Routinely, seniors retiring in their 60's live on another 20 or 30 years or longer. Today we see a generation of "younger" elderly who are healthy and fit and whose health concerns are very different from the elderly who are over the age of 75. Consequently, the health concerns of older women range from issues of prevention and health maintenance to issues of treatment and symptom control.

Today we will hear from a number of experts about health problems facing older women—osteoporosis and arthritis, heart disease, vision loss and others—as well as from experts in the field of health education and awareness. The purpose of our hearing today is to begin to explore these health issues. We want to learn what is known about various conditions, their treatment and prevention. Following this session, we will hold further hearings on steps that the Federal Government and private citizens can take to improve the health status of older women.

Already, some legislative actions are in progress. I have introduced a package of legislation to improve Medicare coverage for older women and men. H.R. 1401 would establish Medicare coverage for long-term care services through comprehensive, prepaid programs. These health services would include congregate housing, home health and homemaker services, and other community-based and institutional services which are desperately needed by the frail elderly, most of whom are women.

Another bill I have introduced, H.R. 1402, would create a new preventive care option under Medicare. This would pay for an annual checkup, blood pressure test, cancer screening, nutrition assessment, and other services to prevent the onset and advance of illness. Clearly, the need for preventive care does not stop at age 65. Prevention and early detection of health problems will improve the well-being of our seniors and, undoubtedly, save money for the Medicare Program.

The third bill in my medicare reform package is H.R. 1403, which would establish a part C to cover routine vision, hearing, and dental care and prescription drugs. Currently, medicare does not contribute anything toward these health expenses for the elderly. Yet, all senior citizens need these basic health services for their daily living and, tragically, are less and less able to afford them.

In addition to these bills, I want to commend my colleagues on the task force for their legislative initiatives. Congresswoman Snowe, for example, is the author of "National Osteoporosis Awareness Week," A bill to inform Americans about this growing health problem affecting older women. I have joined Olympia as a cosponsor of this legislation, and look forward to continued progress in fighting osteoporosis.

Our expert witnesses today will tell us more about osteoporosis, and other health problems affecting primarily older women. I want to extend my special thanks to our witnesses for being here today to educate us about these issues. I look forward to hearing your statements.

Ms. OAKAR. I am very, very happy that we have with us a very distinguished Member from New York, Congressman Manton. So I would like to call on him at this time for whatever comments he might want to make.

STATEMENT OF REPRESENTATIVE THOMAS J. MANTON

Mr. MANTON. Thank you, Madam Chairman.

I would first like to thank you as chair of the Task Force on Women and Social Security for calling today's important hearing, which emphasizes the health concerns of older women. I would like to commend my friend and colleague, Ms. Oakar, for her leadership and commitment within the Congress to the needs and concerns of women, and particularly older women.

The phrase, a graying America, is often used to describe the population trend of our Nation. While it is true that more and more Americans can and will be accurately described as older Americans, it is important to remember that a greater percentage of this population will be female.

The Census Bureau estimates that in 1986 almost 60 percent of all elderly persons age 65 years or older will be women; and that the oldest portion of our population, those over 85 years of age, 70 percent will be women. The over 85 years of age segment of our population is also the fastest growing segment of our population.

In addition, we also know that these older women are more likely to be living alone, and are also more likely to be less financially secure than married elderly couples.

Therefore, it is clear that today's hearing is important for the Congress to understand the health concerns and experiences of older women while we shape national health care policy.

Today's hearing is an important first step in gaining a better understanding of women's health concerns and how these concerns can best be addressed by the Select Committee on Aging and by the Congress. I look forward to reviewing the record of today's hearing and will keep today's testimony in mind as I consider proposals before the Congress which affect older Americans.

Ms. OAKAR. Thank you very much.

At this time, I would like to call on Dr. T. Franklin Williams, who is the Director of the National Institute on Aging. Doctor, again I apologize for starting late, but I was unavoidably detained, unfortunately.

STATEMENT OF T. FRANKLIN WILLIAMS, M.D., DIRECTOR, NATIONAL INSTITUTE ON AGING

Dr. WILLIAMS. Madam Chairman and members of the Task Force on Social Security and Women, on behalf of the National Institute on Aging, I appreciate this opportunity to appear here today to provide information on older women's health concerns and to outline briefly NIA-supported research programs pertinent to this topic.

I submitted written testimony, and would request that it might be included in the record. I will simply present highlights here.

Ms. OAKAR. Without objection, it will be included in the record.

Dr. WILLIAMS. Few features of the human aging process have such enormous personal, economic, social and cultural consequences as the sex differential in longevity. As you have already cited, these differences show up more and more in our data. One example is that, in the group over age 85 in our population, there are five women for every two men.

Paradoxically, although mortality is greater for men than women at all ages and for all leading causes of death, women consistently show higher morbidity from acute conditions and nonfatal chronic diseases, that is, more disability and need for services.

In the material I have provided there are several tables and two graphs. I would like to call attention to the graphs. These are taken from unpublished data in the National Health and Nutrition Examination Surveys, a 10-year longitudinal followup on people

who were 55 to 59 years old 10 years ago, and who have now been resurveyed.

The first of the two graphs shows the survival curve and the extent of disability for women; the second curve compares women and men. I would like to call attention to the women and men graph, where the survival trend for women, although it does fall over the 10-year period, does not fall nearly as much as for the men. On the other hand, the disability in women rises more than the disability in the men over this 10-year period. This is borne out by other data such as is summarized in some of the tables.

With this kind of picture, we need to develop a more comprehensive data base to enable us to understand why these gender differences exist in both mortality and disability.

The underlying differences in longevity between men and women are thought to be complex, and possibly include such factors as genetics, immunity, hormones, metabolism and lifestyle. Each of these factors needs to be examined through further research.

If I could digress just once more on the genetic issue, in some of my own earlier research studying the condition called vitamin D resistant rickets, a hereditary form of rickets which our research has established that it is carried on the X chromosome and is a dominant—the men affected with this condition were much more severely affected than the women. One explanation for this is that in the women a normal X chromosome was present along with the affected X chromosome and may have provided some protection against some of the deleterious effects of the affected X chromosome; whereas in affected men, there is only the one affected X chromosome, and therefore a more severe form of the disease.

This reasoning might be applied overall to say that women have a general protective value from having two X chromosomes. This is only one feature that needs further examination in terms of looking for what are almost certain to be some genetic factors explaining this prevalent difference in mortality between men and women.

Gender differences play a role in economic considerations as well. You have already pointed out key features about that. I would just emphasize that twice as many older women who live alone are in the poverty category as any other group of older people. Almost 30 percent of older women living alone are in the poverty income level.

With these statistics in mind, I believe it is vital to vigorously pursue research on the diseases and conditions which so often plague older women. Our goal should be to help older people, specifically older women, to remain functional and independent for as long as possible.

I would like to present a few high priorities for research. One of these is to learn more about people over the age of 85. As already pointed out, this group is the most rapidly growing in our population, and it is predominantly women. We know very little about the characteristics or the specific needs of this group. The National Institute on Aging is supporting studies to clarify some of these characteristics and answer such questions as: "What will the very old people of the future be like in terms of health, ability to function, values and attitudes? What changes should be made in social structures to accommodate their needs and utilize their contributions?"

It is important to realize that greater numbers of women are entering the workforce, and we know very little about the impact of this on their health or their lives.

We need more information on intergenerational relationships, particularly those involving women over the age of 85 where we are seeing more and more three- and four-generation families. Actually, it is the sandwich generation, people who are reaching their sixties who are providing care for very old parents and still involved often in care of their children, or grandchildren, that are a matter of concern to us. The implications of all of these changes need much further study.

Another high priority area concerns the chronic problem of osteoporosis and falls and gait disorders. Osteoporosis, as already referred to, is very common in women, affecting about 20 million women, and is a major risk factor for hip fracture. Over the age of 75, about 90 percent of women have demonstrable osteoporosis. Falls and gait disorders, which aren't inevitable with age, also lead to hip fractures.

The results of these hip fractures are pain, suffering, restriction of daily activities, institutionalization and death. Hip fractures are estimated to cost $2 billion or more in this country, and about half of them occur over the age of 65.

Our institute is financing research on the neurological, muscular, perceptual and cardiovascular factors which lead to these falls and problems. One example I cite in my summary is a cooperative study being done with the Health Care Financing Administration, the Robert Wood Johnson Foundation, and the Kaiser Foundation Hospitals, to demonstrate a comprehensive prevention program on falls and to develop a better understanding of the epidemiology of falls and associated injuries.

Another very important aspect of osteoporosis is the question of estrogen therapy in post-menopausal women. We need to know what benefits and risks are involved before we can safely prescribe this type of treatment. Toward this end, a number of institutes at NIH are developing a proposal for a major clinical trial on this condition.

Another chronic problem is urinary incontinence, which may affect as many as 10 percent of older people, with women twice as vulnerable as men. It restricts the daily activities of some half million people still living at home, and affects about that many more in nursing homes. It causes embarrassment, discomfort, feelings of isolation and is one of the three major causes of admission to nursing homes, the other two being mobility problems and dementia. It is estimated that urinary incontinence accounts for about $1.5 billion in nursing home costs per year.

Our institute is supporting research on both the underlying causes and on approaches to treatment, we have already been able to demonstrate that in 75 or 80 percent of instances of urinary incontinence, this condition can be controlled or managed. Right now we are conducting, along with the Division of Nursing of the Bureau of Health Professions, a series of clinical trials on treatment of this condition.

In relation to cognitive and dementing disorders, about 2.8 million people over the age of 65 are thought to have serious problems,

with women in larger numbers than men. This may be simply because women live longer and are at an increased risk for this reason. There is no clear evidence that women are more likely to be afflicted for some intrinsic feature, but rather that they may live until the age range where the disease becomes more common.

Because so many women are widowed in this age group, they often require either institutional care or some form of in-home services. All of these provisions are very costly. The current estimate is that the current burden of Alzheimer disease is about $38 billion per year in this country in terms of cost for care.

Scientific opportunities for the study of Alzheimer disease are very promising right now in directions based on molecular biology, genetics, protein chemistry, social studies and epidemiology. I am sure you would agree that only through research are we able to eventually conquer this condition. The National Institute on Aging supports 10 newly established Alzheimer disease research centers, as provided for by Congress. These centers provide the resources and environment necessary for collaborative multidisciplinary studies. Other research focuses on diagnosis, pathogenesis, causes and treatment and is carried out by other institutes as well as our own.

In another area that you also referred to, the matter of prevention, reversal or postponement of problems, we are conducting research studies on nutrition, exercise and promotion of better health behavior. There have been some very promising findings in these areas already, especially in the area of exercise. We need to pay more attention to gender differences in all of these activities.

Within our own intramural research program in Baltimore, the Baltimore Longitudinal Study on Aging is one of the basic sources of information on normal aging among healthy human volunteers. This study began in 1958 with men only. In 1978, women were added, and the group of women in this study has now built up to about 300. We intend to move on to increase the number of women so that we have at least the same number of women as men, maybe about 1,000 in this ongoing, very important study.

In addition, the NIA is supporting longitudinal epidemiologic studies of four populations of people over the age of 65, which are providing information on the incidence and prevalence of diseases and disabilities among older people. Substantial information will become available on the women in these study populations. One of these populations is a predominantly black population and will therefore provide valuable information on black women. Some of these studies are now in their fourth or fifth year. The one involving the black population is in its second year.

The Assistant Secretary for Health established a public health service Task Force on Women's Health Issues in 1983. The report of that task force, to which our institute contributed, has been published in this last year and addresses important women's health issues, including issues particularly on older women. This task force is developing a followup implementation plan in which our institute is also participating.

To close, I would say that I believe we are living through a kind of social revolution in this country and around the industrialized world. The numbers of older people, especially women, continues to

increase at a phenomenal rate. It is important for us to conduct and support research on every aspect of this older population so that we may gain a healthier, more independent and less costly society in the not too distant future.

This concludes my prepared statement, Madam Chairman.

[The prepared statement of Dr. Williams follows:]

PREPARED STATEMENT OF T. FRANKLIN WILLIAMS, M.D. DIRECTOR, NATIONAL INSTITUTE ON AGING, NATIONAL INSTITUTES OF HEALTH, PUBLIC HEALTH SERVICE, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Madam Chairman and members of the Task Force on Social Security and Women, on behalf of the National Institute on Aging (NIA), I appreciate this opportunity to appear here today to provide information on older women's health concerns, and to outline briefly NIA-supported research programs pertinent to this topic.

Few features of the human aging process have such enormous personal, economic, social, and cultural consequences as the sex differential in longevity. Life expectancy at birth for women has increased far more rapidly than for men. In 1983, there were more than 5 million more women than men over age 65, a ratio of 3 older women to every 2 older men. Among those over the age of 85 there are almost 5 women for every 2 men. Although mortality is greater for men than women at all ages and for all leading causes of death, women consistently show higher morbidity from acute conditions and nonfatal chronic diseases. Women also show more short-term disability, medical service use, and medical drug use. We need to develop a more comprehensive data base to enable us to understand why these gender differences exist. Underlying reasons for the differences in longevity between men and women are thought to be complex and possibly include such factors as genetics, hormones, immunity, metabolism, and lifestyle. Each of these factors needs to be examined through further research.

Gender differences play a role in economic considerations, as well. Because women live so much longer than men, yet suffer chronic conditions to a far greater extent, women are more likely to live alone and require some type of informal assistance from another person in performing everyday tasks. By 1995 more than 55 percent of elderly households are expected to be comprised of people living alone or with a non-relative; 80 percent of this population will be women. Data from the Bureau of the Census show that older women living alone are at a clear risk of poverty. In 1982, for example, 14.6 percent of all older persons were living below the poverty line. Twice as many older women who lived alone (28.7 percent) were in this category. Median income levels for women begin at lower levels than for males and start to decline at age 50. In 1981, a woman at age 65 had a median income of $4,800, compared with about $7,500 for men of the same age.

With these statistics in mind I believe it is vital to pursue vigorously research on the diseases and conditions which so often plague older women. To help older people, specifically older women, to remain functional and independent for as long as possible ought to be our goal.

A high priority at NIA is to learn more about people over the age of 85 years. Until recently, this population has been relatively invisible; today it is the most rapidly growing segment of our population. These older people, comprised predominantly of women, require health care services to a far greater extent than the rest of the population. Obviously, certain programs and services will be necessary for these people but it is not possible to plan until we learn more about the size, nature, and specific needs of this population. To this end, NIA is supporting studies which seek to clarify characteristics of this population. Other NIA-supported studies include research on morbidity, mortality, and causes of death. This research also seeks answers to such questions as: "What will the very old of the future be like in terms of their health, their ability to function, their values, and their attitudes?" What changes should be made in social structures to accommodate their needs and utilize their contributions? These questions are particularly relevant to older women, many of whom will have participated in the work force for longer periods of time than ever before in our history, yet we do not know the impact of this changing role for women. Intergenerational relationships, particularly those involving women over the age of 85, are of prime concern in these studies. In many instances, those aged 85 and over are being cared for by middle aged children who are themselves taking care of their younger children. Such three generation families are becoming more prevalent as life expectancy increases. The implications for informal, as well as formal, systems of support are enormous and in need of further study.

NIA also is supporting several research projects aimed at learning more about certain chronic ailments which seem to afflict great numbers of older women. Both within our Institute and through NIA research grant awards around the country, investigators have made research on osteoporosis and falls and gait disorders a high priority. Osteoporosis, a disorder in which bone mass and strength gradually decrease, affects approximately 20 million women and is a major risk factor for hip fracture. The percentage of women affected rises steadily from approximately 30 percent among women aged 45 to 54 to approximately 90 percent among women over the age of 75. Falls and gait disorders are not inevitable results of age but do predispose people to subsequent hip fractures. The result of these hip fractures is often pain, suffering, restriction of daily activities, institutionalization and death. Hip fractures in older people are a major cause of mortality and morbidity and are estimated to cost this country $2 billion per year in medical care. There are estimated to be 200,000 hip fractures in the United States each year; 84 percent occur in persons over age 65. NIA is soliciting research aimed at determining the neurological, muscular, perceptual, and cardiovascular factors which lead to these devastating falls in elderly people. Gait disorders may be a problem which can be attacked through careful investigation of causes; appropriate, specific treatment where possible; and physical therapy to improve function of muscles and joints. The NIA currently is cooperating with the Health Care Financing Administration (HCFA), The Robert Wood Johnson Foundation, and the Kaiser Foundation Hospitals, Inc., in a demonstration project to develop a comprehensive prevention program and to develop a better understanding of the epidemiology of falls and associated injuries.

Estrogen therapy for post-menopausal women and those suffering from osteoporosis is still under study. We need to know what benefits and risks are involved before we can safely prescribe this type of treatment. Toward this end several of the institutes (National Heart, Lung, and Blood Institute, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, National Institute on Aging, National Institute of Child Health and Human Development, and National Cancer Institute) intend to work together to consider a major clinical trial. Discussions for this clinical trial on the use of estrogen are in the beginning stages and include a determination of the feasibility of such a trial and the identification of the major parameters to be considered.

Urinary incontinence may affect as many as 10 percent of our older people—women are more than twice as vulnerable as men. Urinary incontinence restricts the activities of some 500,000 people. The condition often causes the victim embarrassment, discomfort, and feelings of isolation. It is a major cause of nursing home admissions. The Division of Nursing in the Bureau of Health Professions is co-sponsoring a special initiative with NIA entitled: "Clinical Trials of Behavioral Therapies for Urinary Incontinence in the Elderly." Therapies include habit retraining, bladder training, pelvic floor exercises, contingency management, and biofeedback approaches. These trials are an important step toward eliminating this potentially expensive and often unnecessary condition. The cost of care for approximately 600,000 nursing home patients with urinary incontinence is estimated to be as high as $1.5 billion annually. This represents between 3 and 8 percent of the total expenditure on nursing home care in this country. The NIA is supporting research aimed at identifying the underlying causes of incontinence. Such studies focus on the pathophysiology of various components of the urinary tract system.

As many as 10 percent of the 28 million Americans over the age of 65 suffer from serious cognitive deficits; more than half of these suffer from Alzheimer disease. Women are afflicted in larger numbers than men. The actual reason for this is not clear, but may be simply due to the fact that because they live longer they are at an increased risk of being afflicted. Because so many women suffering from Alzheimer disease are widowed they often require institutional care. Even in a residential setting, some type of in-home service often is necessary. These provisions are costly. The burden of this terrible disease on families and the cost to society is an estimated $38 billion each year. Scientific opportunities in molecular biology, genetics, protein chemistry, epidemiology, and other relevant fields are ready to be exploited. Only through research can this disease eventually be conquered. The NIA supports 10 newly established Alzheimer Disease Research Centers (ADRC's). Their purpose is to enhance research on Alzheimer disease by providing the resources and environment for collaborative, multidisciplinary studies. Additional NIA research projects focus on diagnosis, pathogenesis, causes and treatment of Alzheimer disease. The National Institute of Mental Health (NIMH) and the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) also support studies in the vast effort to prevent, diagnose, and treat this devastating disease.

Research conducted by NIA suggests that many of the disabilities of old age can be prevented, reversed, or postponed. Research in nutrition, exercise, and promoting better health behavior is just beginning but such studies hold a great deal of promise to help older people to maintain their health. Gender studies in these areas must also be initiated. There is a need for more complete, soundly based guidelines for disease prevention and health promotion in the elderly.

Within NIA's intramural program the Baltimore Longitudinal Study on Aging (BLSA), which looks at normal aging among community-living volunteers, was initiated in 1958. At the outset the BLSA included approximately 1000 male volunteers but, in January 1978, added more than 300 women in order to be able to examine gender differences more adequately. Our intent is to increase the number of women in the study to match the number of men.

In addition to the BLSA study, NIA's Epidemiology, Demography, and Biometry Program is supporting studies of four populations (New Haven, East Boston, Iowa, North Carolina) which are providing information on the incidence and prevalence of diseases among older residents as well as the use of health care services by these people. Substantial information will become available on the women within these communities. The population under study in North Carolina is predominately black and will, therefore, ascertain valuable information on black women.

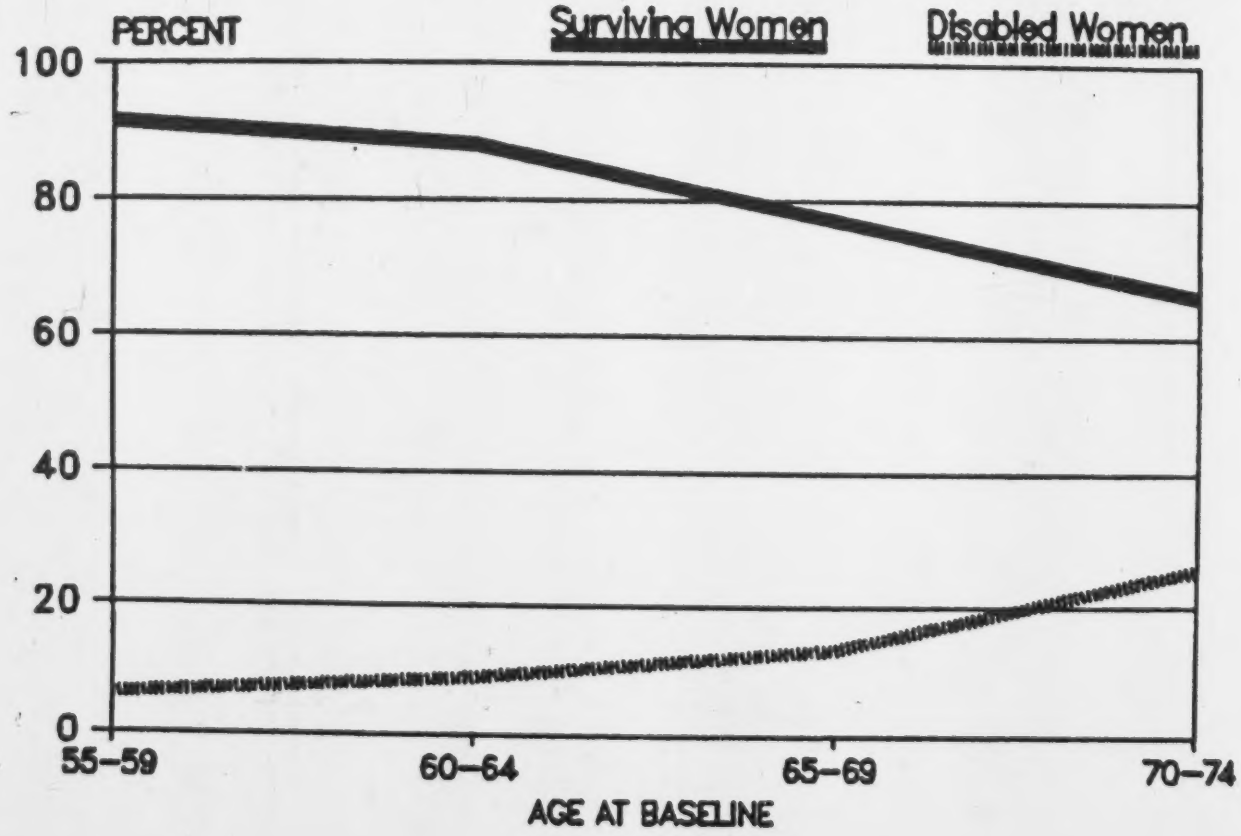
The Assistant Secretary for Health established a Public Health Service-wide Task Force on Women's Health Issues in 1983. The report of this Task Force, which was published in early 1985, addresses important women's health issues in today's society and includes a chapter pertaining particularly to older women. Included in these health concerns are chronic conditions such as incontinence, impairments in sensory modalities, especially vision and hearing, foot problems, osteoporosis, cancer, and drug and alcohol abuse. NIA had a major role in the preparation of the chapter on older women which also discusses many of the physical, mental, and social concerns faced by women over the age of 65. The report emphasizes the fact that good health promotion throughout life is a key to good health in later years.

As a follow up to the Task Force Report on Women's Health Issues, the NIH has established an Advisory Committee consisting of representatives of the various institutes, including NIA, to plan for the implementation of the recommendations of the Task Force Report. As a first step, the NIH Committee is compiling an inventory of NIH research related to women's health. To aid in this endeavor, a large percentage of NIA's research grants relevant to women's health issues (osteoporosis, falls, the menopause, and health behaviors of women) will be added to this NIH inventory.

I believe that we are living through a kind of social revolution in this country, and around the industrialized world. The number of older people, and especially women, continues to increase at a phenomenal rate, and shows every indication of continuing to do so. It is important for us to research every aspect of this older population so that we may gain a healthier, more independent, and less costly society in the not too distant future.

This concludes my prepared statement, Madam Chairman. I would be pleased to answer any questions you and members of the Task Force may have.

SURVIVAL AND DISABILITY IN A TEN YEAR FOLLOWUP, NHANES



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SURVIVAL AND DISABILITY IN A TEN YEAR FOLLOWUP, NHANES

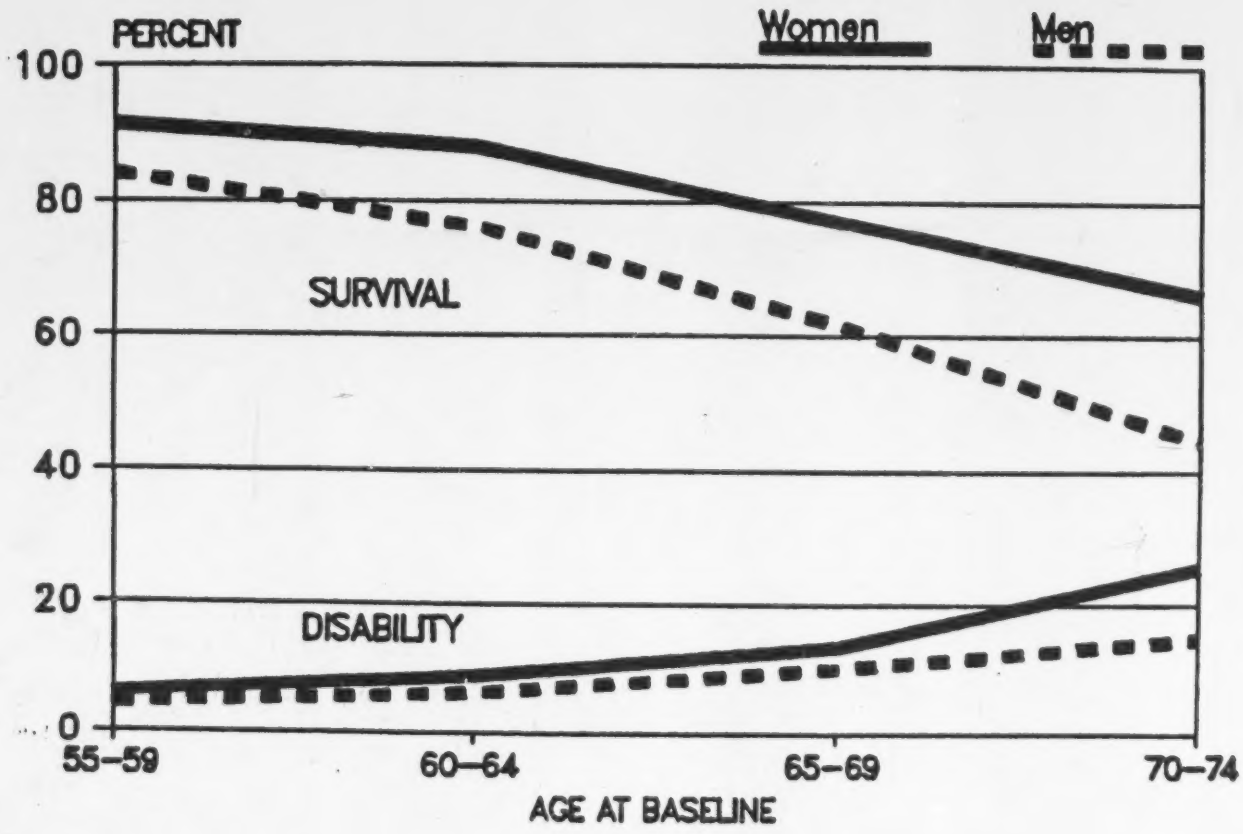

Table 3 Sex-specific mortality rates and sex differentials for the twelve leading causes of death,[a] United States, 1980[b]

Cause	Age-adjusted mortality rate[c]		Sex ratio (M/F)	Sex difference (M–F)
	Males	Females		
Diseases of the heart	280.4	140.3	1.99	140.1
Malignant neoplasms	165.5	109.2	1.51	56.3
Respiratory system	59.7	18.3	3.43	41.4
Cerebrovascular diseases	44.9	37.6	1.19	7.3
Accidents	64.0	21.8	2.93	42.2
Motor vehicle	34.3	11.8	2.90	22.5
Other	29.6	10.0	2.96	19.6
Chronic obstructive pulmonary disease	26.1	8.9	2.93	17.2
Pneumonia and influenza	17.4	9.8	1.77	7.6
Diabetes mellitus	10.2	10.0	1.02	0.2
Cirrhosis of the liver	17.1	7.9	2.16	9.2
Atherosclerosis	6.6	5.0	1.32	1.6
Suicide	18.0	5.4	3.33	12.6
Homicide	17.4	4.5	3.86	12.9
Certain causes in infancy	11.1	8.7	1.27	2.4
All causes	777.2	432.6	1.79	344.6

[a]Rank based on number of deaths.
[b]Calculated from data from the National Center for Health Statistics, 1983 (68).
[c]Per 100,000, direct standardization to the 1940 total US population.

TABLE 1. Death Rates for Males and Females, by Age and by Cause of Death, United States, 1980

Age-Specific Death Rates	(Rates per 100,000 population) Male	Female	Sex Difference (M-F)	Sex Ratio (M/F)
All Ages	977	785	192	1.24
Under 1	1428	1142	286	1.25
1–4	73	55	18	1.33
5–14	37	24	13	1.54
15–24	172	58	114	2.97
25–34	196	76	120	2.58
35–44	299	159	140	1.88
45–54	767	413	354	1.86
55–64	1815	934	881	1.94
65–74	4105	2145	1960	1.91
75–84	8817	5440	3377	1.62
85+	18801	14747	4054	1.27

Cause-Specific Death Rates for Leading Causes[a]	(Age-adjusted rates per 100,000 pop.)[b] Male	Female	Sex Difference (M-F)	Sex Ratio (M/F)	Ranks[c] M	F
All Causes	777.2	432.6	344.6	1.80		
Diseases of heart	280.4	140.3	140.1	2.00	1 (1)	1 (1)
Malignant neoplasms	165.5	109.2	56.3	1.52	2 (2)	2 (2)
Cerebrovascular diseases	44.9	37.6	7.3	1.19	4 (4)	3 (3)
Accidents	64.0	21.8	42.2	2.94	3 (3)	4 (4)
Motor vehicle	34.3	11.8	22.5	2.91		
Other	29.6	10.0	19.6	2.96		
Chronic obstructive pulmonary diseases	26.1	8.9	17.2	2.93	5 (5)	7 (8)
Pneumonia and influenza	17.4	9.8	7.6	1.78	7 (6)	6 (5)
Diabetes mellitus	10.2	10.0	0.2	1.02	10 (10)	5 (6)
Chronic liver disease and cirrhosis	17.1	7.9	9.2	2.16	8 (8)	9 (9)
Atherosclerosis	6.6	5.0	1.6	1.32	11 (12)	12 (7)
Suicide	18.0	5.4	12.6	3.33	6 (7)	11 (12)
Homicide	17.4	4.5	12.9	3.87	7 (9)	13 (13)
Conditions originating in perinatal period	11.1	8.7	2.4	1.28	9 (11)	8 (11)
Nephritis and nephrosis	5.7	3.6	2.1	1.50	13 (13)	14 (10)
Congenital anomalies	6.5	5.6	0.9	1.16	12 (14)	10 (12)
Septicemia	3.2	2.2	1.0	1.45	14 (15)	15 (14)
All other causes	83.1	52.1	31.0	1.60		

SOURCES: For age-specific rates, Monthly Vital Statistics Report. Vol. 31, No. 13: Table 6. 5 October 1983. For cause-specific rates, Monthly Vital Statistics Report, Vol. 32, No. 4, Supplement: Table 9. 11 August 1983. Published by National Center for Health Statistics, Hyattsville, MD.

[a] Causes are listed on left in rank order of 1980 crude rates for the total population.

[b] Computed by the direct method, using as the standard population the age distribution of the 1940 total U.S. population.

[c] Ranks outside parentheses are based on the age-adjusted rates; those inside are based on crude rates (Table 8 of Source). The 15th rank age-adjusted cause for males is: Hypertension with or without renal disease (2.4) and Ulcer of stomach and duodenum (2.4).

TABLE 2. Health Statistics for American Men and Women. (Rates and sex ratios (F/M) based on national health surveys)

Incidence of acute conditions (1981 and 1977–78)	No. of conditions per 100 persons per year					
	Men 17–44	Women 17–44	F/M	Men +45	Women +45	F/M
All acute conditions (1981)	190.8	243.1	1.27	107.6	131.3	1.22
Infective and parasitic diseases	17.5	25.5	1.46	5.8	9.7	1.67
Respiratory conditions	98.2	123.6	1.26	61.0	70.9	1.16
Upper resp. cond.	46.1	56.7	1.23	24.3	30.1	1.24
Influenza	48.0	59.9	1.25	32.6	34.8	1.07
Other resp. cond.	4.1	7.0	1.71	4.1	5.9	1.44
Digestive system conditions	9.7	11.4	1.18	4.5	5.6	1.24
Injuries	47.1	29.3	0.62	20.4	22.2	1.09
All other acute conditions	18.3	53.3	2.91	15.9	23.0	1.45
All other acute conditions (1977–78)[a]	21.8	50.3	2.31	15.7	26.0	1.66
—Excluding reproductive conditions	21.8	40.4	1.85	15.7	26.0	1.66

Prevalence of chronic conditions (1979) (selected titles)[b]	No. of conditions per 1,000 population								
	Ages 17–44			45–64			65+		
	M	F	F/M	M	F	F/M	M	F	F/M
Heart conditions[c]	33	41	1.24	132	126	0.95	266	281	1.06
Coronary heart disease[c]	4*	1*	0.25	76	34	0.45	145	96	0.66
Hypertensive disease[c]	60	57	0.95	203	225	1.11	315	434	1.38
Cerebrovascular disease[c]	1*	2*	2.00	14	17	1.21	40	40	1.00
Atherosclerosis[c]	1*	1*	1.00	28	15	0.54	122	125	1.02
Varicose veins	5*	32	6.40	23	77	3.35	37	126	3.41
Hemorrhoids	45	52	1.16	60	69	1.15	52	76	1.46
Chronic bronchitis	18	35	1.94	34	37	1.09	36	52	1.44
Emphysema	2*	.5*	0.25	29	18	0.62	68	24	0.35
Asthma, with or without hay fever	22	26	1.18	28	40	1.43	22*	20	0.91
Chronic sinusitis	120	176	1.47	164	212	1.29	135	171	1.27
Ulcer of stomach and duodenum	19	18	0.95	34	26	0.76	21*	39	1.86
Frequent constipation	2*	19	9.50	13	40	3.08	42	80	1.90
Gallbladder conditions	1*	12	12.00	9*	17	1.89	13*	22	1.69
Diverticula of intestine	.2*	1*	5.00	14	16	1.14	16*	37	2.31
Chronic enteritis and colitis	4*	13	3.25	8*	20	2.50	10*	23	2.30
Eczema, dermatitis, and urticaria	26	48	1.85	32	44	1.38	30	24	0.80
Corns and callosities	14	21	1.50	23	57	2.48	30	74	2.47
Arthritis	37	58	1.57	188	312	1.66	355	504	1.42
Bunion	2*	8	4.00	8*	23	2.88	5*	42	8.40
Synovitis, bursitis, and tenosynovitis	14	20	1.43	46	56	1.22	19*	43	2.26
Gout	4*	1*	0.25	28	11	0.39	34	22	0.65
Thyroid conditions	3*	21	7.00	8*	43	5.38	12*	37	3.08
Diabetes[c]	8	9	1.13	56	60	1.07	74	84	1.14
Anemias	2*	27	13.50	3*	17	5.67	10*	36	3.60
Migraine	16	48	3.00	17	63	3.71	8*	20	2.50
Diseases of urinary system[d]	10	42	4.20	17	45	2.65	36	71	1.97
Visual impairments	42	18	0.43	74	43	0.58	120	118	0.98
Hearing impairments	56	34	0.61	148	93	0.63	327	250	0.76
Absence of extremities or parts of extremities	7	1*	0.14	34	7*	0.21	42	12*	0.29
Paralysis, complete or partial, of extremities or parts of extremities	4*	1*	0.25	8*	5*	0.63	20*	18	0.90
Deformities or orthopedic impairments	103	88	0.85	122	114	0.93	145	174	1.20

Ms. OAKAR. Thank you very much.

I am going to call on my colleagues first for questions. Congresswoman Schneider.

Mrs. SCHNEIDER. Dr. Williams, I am a member of the Science and Technology Committee. In that capacity, we have numerous opportunities to review research that is being done by the Federal Government.

One of the things that I find so frequently by members of the various agencies, and particularly someone in your position, is that your responsibility is to oversee and conduct research and to direct where we spend our limited dollars for the research.

I am interested in knowing your feelings as to where that research is going. What we see a great deal happening in many different disciplines is that much of the research is placed on shelves, never to truly reach the people. I am sure that you must have many frustrations within your agency. The reason I am asking this is to assist in facilitating the movement of that research into the hands and the minds of John Q. Public.

So I wonder if you could elaborate for me any particular areas or disciplines where you feel particularly frustrated, that the research that you have developed justifies some action but has not been moved into action.

Dr. WILLIAMS. I think this is a very important issue. It is a constant issue, in my judgment, in our whole research endeavor. Throughout my own research career, all too often what seemed to be good findings have been published or circulated and not much happens.

I think Institutes like the NIA do have opportunities and responsibilities to do something about this. Let me illustrate with a few examples.

In a few of the areas I have mentioned, we are supporting the application of some of the research findings, as well as the basic research. For example, in the urinary incontinence field, we now have two major series of projects that are testing the effectiveness of measures to manage urinary incontinence studied in a more restrictive way in a research laboratory setting.

The same applies in the area of falls and hip fractures where based on evidence that has already been accumulated, we are helping to support a project that attempts to test the effectiveness of preventive measures with a population of older people who are at risk of falling and hip fractures.

I think there are ways that our research institutes can take the step to translate measures into practice. This is the general philosophy of clinical trials, whether they be trials of new drugs or trials of estrogen, for example, as I mentioned in osteoporosis, or trials of new approaches to arrangements for care such as preventive measures for falls, which really involve programs of medical examinations, nutrition, exercise, and general guidance.

The other step we can take is information dissemination. This is one of the specific missions in our charter. We provide a great deal of health information to the public, as well as to practitioners.

To try to answer your question a little more directly about what pitfalls I see, in my judgment we still have too little provision in our research and our demonstration and application endeavors and

too little provision for the translation of these findings into useful practice.

I am drawing here to a considerable extent on my earlier experience as a regular consultant and Study Section member for the National Center for Health Services Research. That group has had and still does have the primary mission to help carry out such translation. I must say that it has been an area that has received minimal attention, and I would say needs more.

Mrs. SCHNEIDER. But how do we go about drawing more attention to it?

Dr. WILLIAMS. I think that one of the important ways is through public knowledge about health possibilities. It seems to me that we have seen almost a revolution in the public's knowledge, understanding and accessibility to information on advances in medicine in just the last few years.

One of the most striking examples is Alzheimer disease; 8 or 10 years ago practically no one had ever heard of it except a few investigators and pathologists. Now I think almost every man or women on the street can tell you something about Alzheimer disease. It is phenomenal, the extent of knowledge that the public has achieved. And people are demanding more careful work-ups and are not willing to be told offhandedly that they have some failing mental capacities and it is Alzheimer disease and they can't do anything about it. That is often not true, and people are not willing to accept that kind of view anymore.

I would say that one thing that can certainly help is public knowledge and public pressure on all of our health services to see that we do address these issues.

Mrs. SCHNEIDER. Let me just pick up on one of the specifics that you mentioned, which is the preventive program on falls. Could you just elaborate just a little bit on some specifics?

Dr. WILLIAMS. Yes; in that particular study—which is being done in Portland, OR through one of the Kaiser Foundation programs there, people over the age of 65 who volunteer to take part are randomized into two groups. One group receives usual regular care, checkups that are called for and other usual measures.

The other group, in addition, receives special targeted attention to search out any nutritional deficits that might contribute to osteoporosis, and is encouraged to enroll in exercise programs. There are home visits to identify any hazards in the home that might be changed, hazards for falls or hip fractures or fractures of any type. The study, in short, is a comprehensive effort to apply everything we know that might help prevent hip fractures to this population, and there are comparative data being collected to see how much difference this makes, and also how much it costs, so we will have some cost and benefit information.

It seems reasonable, but until very recently, we have only begun to see actual tests of what may be most effective.

Mrs. SCHNEIDER. It seems that the program would be incomplete if you only focused on nutrition and exercise. You mentioned, you know, checking and monitoring the home and that sort of thing, but it seems if you eliminate the psychological aspects of falling—I happen to have had an aunt who fell and broke her hip. To me, I am convinced that the reason that she hasn't recovered is more

psychological than it is physical. I think that with older people there is an assumption that they will fall, break their hip and be incapacitated. So the failure to look at the psychological ramifications, I think, is a significant omission in your study, if you don't mind my saying so.

Dr. WILLIAMS. I would have to say that that is included. I didn't happen to emphasize it, but they work a great deal with the attitudes about the people involved.

In one other study that I was a part of before coming to Washington, we found that the mood of people, that is whether they were depressed or not, was significantly correlated with falling. That was one among a number of characteristics that was a real risk factor for falling.

Mrs. SCHNEIDER. Thank you very much.

Ms. OAKAR. Thank you.

Congressman Manton.

Mr. MANTON. Doctor, you mentioned before in your testimony the sandwich generation, and there has been a lot of talk about the over-85 part of our population being the fastest-growing, which indicates that there are children in their sixties who have perhaps dependent parents. What have you done with that group? It seems to me that aside from the fact that they also are aging, there is a lot of stress involved within trying to deal with their very elderly parents as well as their own children who may still be dependent.

Dr. WILLIAMS. It certainly seems clear that this is true from a variety of observations, and from a research point of view we have been examining the interrelationships of stress and illnesses. This has a long history in medicine, but we have been applying it explicitly to some of the factors that occur in just this type of stress. Such stress affects the immune system, susceptibility to infections, and the performance in daily activities. It is an important research issue to try to understand better the implications of the stress. In terms of trying to do something about it, we support studies on the social institutions that do or do not give some support to these care- givers, the arrangements that may help them more through support services, and the constellation of family relationships.

For example, in intergenerational relations, we are seeing that the third generation, the grandchildren of the very old people, is a very important generation. I might also mention that my wife, who is a social worker working in this field, and I prepared a presentation for "Medicine and the Layman" series at the National Institutes of Health about 1½ years ago on "You and Your Aging Parent," and this session has been widely sought after, addressing some of the guideposts that the sandwich generation can probably try to use.

Mr. MANTON. Thank you.

Ms. OAKAR. Congresswoman Meyers.

Mrs. MEYERS. Doctor, it seems to me like one of the principal problems that people have when they live to be quite elderly frequently is that of hearing. Otherwise healthy people have problems with hearing, an isolating factor that can lead I think to depression, and it is also a safety concern if they cannot hear things that are happening in the house or they cannot hear the telephone.

What studies are being done as our population is living longer to help people preserve their hearing? Is anything being done? And what steps are being taken to improve devices which help with hearing, especially nerve deafness?

Dr. WILLIAMS. I will answer in part now. I would like to have permission to submit some more information for the record, if I may, because not only our Institute but the National Institute of Neurological and Communicative Disorders and Stroke is also doing a lot of research in this area that I would like to submit, but basically in terms of prevention.

Ms. OAKAR. Doctor, without objection we will submit whatever other information you would like to submit for the record that would be helpful for this hearing.

[The information follows:]

RESEARCH ON HEARING LOSS IN THE ELDERLY

Deafness and hearing impairment are often described as the silent disabilities, for with few exceptions deafness has no obvious stigmata. Yet in sheer numbers alone deafness and hearing impairment may be the major disability category in the world—2,000,000 deaf and 20,000,000 hearing impaired in the United States. Forty percent (40%) of all adults 65 years and older have hearing impairments. Hearing impairment in the adult may compromise employment opportunities and may compromise the quality of life.

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) is the principal Federal agency supporting research on the many causes of hearing loss, as well as on prevention, treatment, and rehabilitation. Support includes the development of better hearing aids and other ways to augment hearing. Through basic studies of normal hearing and studies targeted on specific impairments, the primary goal of the NINCDS research program is to develop improved methods of prevention. But until this goal of prevention is achieved, research attention will continue to be directed toward better therapies for the hearing impaired.

Perhaps the most ambitious scientific program on the design boards today is the cochlear implant, a device to aid individuals with sensorineural deafness. The implant uses tiny electrodes to apply electrical stimulation directly to auditory nerve fibers. NINCDS currently supports implant research at Stanford University, Palo Alto, California, the University of California at San Francisco, and the University of Washington in Seattle. In some designs the electrodes are implanted in the cochlear itself, positioned to stimulate selected nerve fibers as they spiral around the shell. In other designs the electrodes are applied to nerve fibers after they have been bundled together in the eighth nerve. Either way, the goal is to stimulate fibers associated with a selection of different frequencies so that the brain can distinguish different tones. The state of the art of cochlear implants is in its infancy. A dozen or so microelectrodes cannot be expected to replace the 30,000 nerve fibers we are born with in each ear. But advances in electronics, in computers, in audio engineering, and in hearing science have been great, continue to develop at an impressive rate, and offer hope for the future.

Another NINCDS study, done in conjunction with the National Heart, Lung, and Blood Institute's Framingham Heart Study, used epidemiologic methods to examine hearing loss in the elderly. The Framingham Heart Study Cohort was the reference population. The participants were 935 men and 1358 women, aged 57 to 89 years. Using a conservative definition of hearing loss, the prevalence was estimated to be 83%. The majority of cases displayed a sensorineural hearing loss. There were no statistically significant differences by sex at 1,000 cycles and below. Women had significantly better hearing than men at 2,000 cycles and above. A multivariate model was constructed to determine which variables had a significant impact upon hearing loss. Under the model, age, sex, illness, family history of hearing loss, Meniere's disease, and noise exposure were significant population risk factors. Age was by far the most critical risk factor.

The National Institute on Aging (NIA) also supports research on hearing loss in the elderly. NIA research includes project grants exploring cognitive/adaptive factors in auditory function, high resolution tactile aid for deaf and deaf/blind individuals, and perception of natural and enhanced consonants and vowels by the elderly.

The NIA intramural Baltimore Longitudinal Study on Aging is currently collecting audiometric information on both men and women.

The National Academy of Sciences Committee on Hearing, Acoustics and Biomechanics is preparing a background paper on Aging and Speech Intelligibility. This paper is due for release and publication later this spring, and will be followed by a program announcement in which gender differences can be specified as an interest area.

Dr. WILLIAMS. I certainly agree that it is a major problem. Interestingly, it is more common in men than women, and that is not explained either. It is a problem for many older people; about 30 percent of people over the age of 65 have a significant hearing problem, and it increases with each decade.

In terms of prevention, the only evidence that I know of about something we could try to do now is to keep the noise level down. There is unequivocal evidence that high noise level is a major factor in the increasing loss of hearing. Beyond that I do not think we have any good clues about steps we can take in a preventive way. There is certainly exciting work going on to treat this condition more appropriately—for example, to have tailormade hearing devices that will replace the missing frequencies for a given individual and not simply amplify the whole frequency range. The latter often causes disturbing excess noise in some frequency ranges for a person who is only missing frequencies, let us say, at the high level. This tailormaking of devices I think has a large future.

Then there is, as you are probably aware, research on cochlear implants to try to reach the hearing nerve, to provide more input in a direct way and be more effective than any current hearing device. I think this is a very important field, and it has not received much attention for older people, especially. Most of the research that has gone on in the past has been with congenitally deaf people, which is also very important, but a quite different group.

Mrs. MEYERS. Thank you very much, and I would be interested in anything additional. I have aging parents who are very healthy, but they both have had hearing problems for about the last 10 years, and I have become aware of the way that that really affects people's lives and their ability to participate, even when they can get around and are very healthy otherwise.

Dr. WILLIAMS. It is my observation, and others' too, that for some reason we as a society have been much more reluctant to accept hearing aids than we are glasses. We do not mind wearing glasses, but we often feel embarrassed—or at least older people do—to wear hearing aids, and hearing loss does create great barriers to social life. It seems to me everything we can do to change this reluctance to use hearing aids is very important.

Mrs. MEYERS. I was interested in what you said about the hearing aid that would be more specific, because this is the concern that I have heard expressed, is that what it really does in a crowded room is just amplify all of the sounds, so that you get tremendous noise level, and it really does not help with the hearing that much. So something that is more specific I am sure would be good.

Ms. OAKAR. Thank you.

Congresswoman Bentley.

Mrs. BENTLEY. What is a cochlear implant, Doctor?

Dr. WILLIAMS. This is a device which actually requires surgery where an electrode, a very fine electric wire, is very carefully inserted into the inner ear and put right directly against the cochlear part of the inner ear where little fibers pick up sound waves and transmit those directly into the nerves that go to the brain as electrical impulses. The cochlear implant can provide electrical impulses that are directly picked up by the eighth nerve and are transmitted into the brain in a way that a person can get a sense of hearing. It bypasses the area where these little fibers that ordinarily pick up sound waves have deteriorated or degenerated. It takes some training for the person to understand what comes in on a speaker, a small, portable speaker, and is translated into an electrical impulse, and then that is translated into their nerves and onto their brain. It is not easy to learn, but it does provide definite hearing for some people who otherwise cannot hear at all.

Mrs. BENTLEY. Would that apply perhaps to somebody who may have lost his hearing let us say during the war, and they said that during that time that there is nothing that can be done?

Dr. WILLIAMS. It could, it certainly could. This is one of the groups in which it has been worked with.

Mrs. BENTLEY. On the matter of the person who is losing his hearing, and you made a statement that noise definitely causes the loss, if a person is in the stage of losing his hearing and let us say he plays a television loud to hear, would that loudness continue to have an adverse effect on his hearing and cause it to deteriorate further?

Dr. WILLIAMS. It very probably would. I think the worst damage clearly comes from extremely loud noises, but even a moderately loud noise would probably contribute over time.

Mrs. BENTLEY. One other question, you mentioned, and you may have gone into this before I got here, you mentioned about exercise for osteoporosis. How important is it?

Dr. WILLIAMS. It has a great deal of potential value. We are just beginning to get refined studies on this. There are some studies from Germany and some that we have supported in this country which now show that people, and specifically postmenopausal women, who are the people at greatest risk for osteoporosis, who adopt an exercise program have much less loss of bone than comparable women who do not. We have known for a long time that total disuse produces massive bone loss. For example, research in the days when polio victims were totally paralyzed showed they had massive bone loss very rapidly over a matter of months.

In a more normal situation, we have some definite evidence now that the usual decline in bone mass and bone loss that occurs postmenopausally, also in men but more rapidly in women, is almost stopped by active exercise programs. It is not totally halted, but the loss is greatly diminished.

Mrs. BENTLEY. Is walking considered one of the——

Dr. WILLIAMS. Yes, indeed. An important feature is weight-bearing exercise, which can be walking or cycling or that type of exercise. Swimming is a very good general exercise, but does not benefit the bone mass. It needs some weight bearing that stimulates the bone with each step or each cycle.

Mrs. BENTLEY. Thank you.

Ms. OAKAR. Doctor, I heard a statistic the other day which said that the average family in their forties, a couple that is in their forties, lives with a number of dependents, 2.8 of the dependents would be parents and 2.9 will be children, and so we are seeing a different concept of the American family evolve. Parents may have parents still living. So I guess the good news is that people are living longer, but what you pointed out initially bears some repetition. This is obviously a female issue, the great percentage of people who live longer are women, although we are concerned about men as well, of those people are going to be disabled, and here you are doing all this research related to disability.

I was struck by Congresswoman Schneider's question about this research reaching out, networking across the country, all of our wonderful institutions, they could, you know continue to develop. Do you have a strategy, does the Aging Institute have a strategy for that kind of research?

Dr. WILLIAMS. Let me try to answer in two ways. First of all, on the extent of dependency, it is perfectly true that the amount of dependency, that is of disability and people needing more help, goes up, especially beyond age 85. It is not very high in people in their sixties and seventies. Current figures show that only about 7 percent of people in those decades need any help from another person. But at age 85 and up, the percentage of those needing help reaches about 40 percent, 4 out of 10. You have to remember that 6 out of 10 are still quite independent and have pretty good health.

Ms. OAKAR. But the fastest-growing population group in the country are people over 85, right?

Dr. WILLIAMS. That is correct. There is no question that a sizable number of people need help. In terms of strategies for our Institute's programs, we are working through the regular NIH mechanisms of widespread announcements of our research support. We send these announcements to every academic institution in the country and we have constant communication back and forth, so that I think there is no question about the potential for research in this area reaching people. For example, we have issued special requests for proposals on gait and falls and disorders affecting hip fractures, and we have a number of special requests for proposals concerning dementia and social and psychological problems of aging, so that we do everything possible to make known our mechanisms for research grant support. In instances where we have centers, specifically the 10 Alzheimer disease research centers I referred to, part of their obligation is dissemination of information as well as what we do out of our own office.

Ms. OAKAR. Well, I think what you are doing is very important, the whole area of research at NIH and so on is really important.

I have to ask you the inevitable question today we are going to have and we will all be working on budgets and so on. What do you think, I mean, do you have enough research going on or could we use more, or are you going to be cut?

Dr. WILLIAMS. In my judgment we can certainly do more research in the areas related to aging than we have been doing or can do right now given our budget limits. I think that is clear.

Ms. OAKAR. I have some questions about the whole area of estrogen, because I think that women are really confused about what

that does and does not do and the hormonal imbalance when you get a little older in relationship to diseases like breast cancer, et cetera, which I am going to save for the next panel, but honestly I do not ask that facetiously or in a partisan way. Every administration that I can remember, always, when they have to make cuts, goes after research. It transcends my feelings about this budget, and I think that is the wave of the future. I mean, I think this is as important as anything we do, because we are not planning well enough for what should be good news, that people are living longer. We are not really planning on how to attack some of those problems and how to deal with it.

Alzheimer's is a critical issue, and the pain that that disease causes to families is just unbelievable. I know they are close to understanding a way to almost trigger it away. I know in the area of vaccines for cancer that there is some wonderful research being done at the Institute. Would that not be terrific to have a vaccine for every little kid so he could be vaccinated against cancer? And I just think that we have the wherewithal to do that. I just hope we give you the means to do some of those things, that is all.

Mrs. SCHNEIDER. I would like to interject. I think that your fear is well founded. As I mentioned, serving on the Science and Technology Committee, I have seen our research budget diminish over the last 5 years, and regrettably the only element of research that has been on the increase is research in the defense budget, and as many of you are aware, there is a call for a 40-percent increase in the NASA budget over the next couple of years. I think that one of the greatest faults that I encounter is that scientists are terrible lobbyists and they do not feel the public responsibility to do anything but to do their research. I think that it is critical at this time that the emphasis be placed on the quality of life that we are discussing and where our priorities ought to be set, because this trend will continue unless there is a massive turnaround in establishing what we need to know and how we need to get there.

Ms. OAKAR. Well thank you, thank you very much, Doctor. I thought your statement was really excellent.

Dr. WILLIAMS. Thank you.

Ms. OAKAR. We have a very distinguished panel as our next witnesses: Dr. C. Conrad Johnston, Jr., professor of medicine at Indiana University School of Medicine; Victoria Leonard, who is the executive director of the National Women's Health Network; and Satya Verma, who is with the Pennsylvania College of Optometry, representing the American Optometric Association.

We are very, very happy to have all of you and I hope, Dr. Verma, I did not mispronounce your first name. It is a lovely name.

Dr. VERMA. That is pretty close.

Ms. OAKAR. You can correct me, I hope.

Dr. Johnson, would you like to begin, please.

STATEMENTS OF C. CONRAD JOHNSTON, JR., M.D., PROFESSOR OF MEDICINE, INDIANA UNIVERSITY SCHOOL OF MEDICINE; VICTORIA LEONARD, EXECUTIVE DIRECTOR, NATIONAL WOMEN'S HEALTH NETWORK; AND SATYA VERMA, O.D., PENNSYLVANIA COLLEGE OF OPTOMETRY, REPRESENTING THE AMERICAN OPTOMETRIC ASSOCIATION

Dr. JOHNSTON. I appreciate the opportunity to discuss briefly my own interest in osteoporosis.

Osteoporosis is of course a very important disease affecting millions of people, particularly women in the postmenopausal age range. Costs of the disease are now estimated to be over $6 billion, and the important issue is that many of the fractures which produce the morbidity and the mortality associated with osteoporosis are preventable. The particular fractures which we will discuss are those of the wrist, the spine, and the hip, and the last is perhaps the most important.

Fracture pathogenesis is a complex issue and it is more than just low bone mass. That is, other factors enter into the development of fractures in the elderly, all of whom have low bone mass. Such issues as falls, for example, are important areas for discussion. Nevertheless, low bone mass—or low bone density, if you prefer—is probably the principal contributing factor.

My laboratory has been interested in bone-mass measurements over the last several decades, and our goal is to uncover the mechanisms of bone loss and to be able to predict who is at greatest risk and prevent that bone loss. This kind of research has been developed because of new methodologies which have appeared in the last two decades which allow us to very accurately and precisely measure how much bone is present in the skeleton. Initially this was single-photon absorptiometry, which told us about peripheral bones. More recent has been the development of dual-photon absorptiometry, which allows us to measure bones in the spine and in the hip, and CT scanning, which offers the same opportunity.

I think you must remember that low bone mass in the elderly is a product of two variables. One is how much you have at maturity, about age 40, and how much you subsequently lose. And in an individual either one may dominate.

My laboratory has been particularly interested in patterns of bone loss, and we follow changes over time, particularly in women from age 30 and 40 on. We have determined that bone loss begins from the periphery at around age 45, that it is accelerated at the menopause, and that it subsequently slows. But we also have learned that different individuals lose at considerably different rates, so that you cannot predict from what is present at age 40 what will be present at age 65. Peak bone mass alone is not predictive.

In addition we have learned that different sites lose at different rates, that is, an individual may lose more from the spine than from the hip, or from the hip than from the radius. But in any case there is an accelerated loss at the menopause. Now all women go through menopause, but everyone after menopause loses at a somewhat different rate, and one of the goals of our research has been to be able to determine why those individuals lose at different

rates. For the last 5 years we have been conducting such prospective studies ordered by the National Institute on Aging, directed toward the question of whether the residual estrogen and/or androgen concentrations are important in determining subsequent rates of loss. Women do not stop making estrogen and androgen at menopause, and there is a difference between individuals in the concentration of residual hormones. Our initial preliminary data would suggest that these residuals indeed may be important in determining subsequent rates of loss.

Currently we are beginning a prospective study—again a program project supported by the National Institute on Aging—addressed at other determinants of bone loss among elderly females in particular. We will continue our studies on the effects of estrogen and/or androgen, or the residual concentrations on bone loss, and we will also be looking at women aged 40 to 50, since it has become apparent that loss from the spine begins earlier than menopause and perhaps as early as age 35. This could indeed be related to changes in estrogen concentration.

We are also looking at the effects of obesity and diabetes on bone loss. Obesity and diabetes or adult-onset diabetes seems to be protective. We would of course not advocate gaining weight and developing diabetes to prevent bone loss, but this information may give us some clue as to what slows loss, and might be applicable to prevention. We are also looking at genetic effects on the determination of peak bone mass and bone loss.

We initially did studies about a decade ago on twins. These studies showed that indeed there is a substantial genetic component, but there is genetic-environmental interaction as well. This may be important in determining how one's peak bone mass is affected. We will be looking at young children, as well as elderly twins, in order to explore these genetic and genetic environmental interactions.

In addition we are looking at the issue of calcium supplementation. I am sure everyone has heard a great deal about that. There is a lot in the lay press about the effects of calcium. My own thoughts are that perhaps adequate calcium intake during the years of attaining peak skeletal mass is most important. We will be using the twin model——

Ms. OAKAR. Would you repeat that, because we do not understand that.

Dr. JOHNSTON. Well, how much calcium you take when you are growing, when the skeleton is growing, may be more important in determining——

Ms. OAKAR. At what ages?

Dr. JOHNSTON. Up until age 25.

Ms. OAKAR. OK.

Dr. JOHNSTON. This may be most important in determining how much you have at age 40, and that of course is one of the critical factors in how much you lose. We will be looking at a twin model again, which is a very, very effective way to test a drug effect in giving one identical twin a calcium supplement, and the other a placebo, maintaining their normal intake, because many youngsters in this country do not take very much calcium. You see the figures on how much postmenopausal women take. We have done a

survey in Indiana of twins in the teenage range, and many of them are taking less than 500 milligrams of calcium a day. The RDA for growing children is 1,200 milligrams. So we are focusing on that as well.

I think we have learned a great deal about osteoporosis, and its determinants. We can help people with the disease currently. We have ways to prevent bone loss—calcium supplementation, exercise, and particularly estrogen. But there are a number of important questions which need further exploration, and I will close by simply outlining those that I think are most important.

Certainly the basic studies of bone biology must continue, for it is from that area that new initiatives will develop. Our understanding of how the skeleton works is critical. For example, throughout life the skeleton grows on the outside, the periosteal surface. It is always in positive balance, so you are adding bone continuously while you are losing it from inside the bone. That is why you develop osteoporosis. The same cells on one side are in positive balance, but the other side are in negative balance.

Now, what is it that controls that balance? Why is it that you can remain in positive balance on one surface and in negative balance on the other surface? Obviously it is some local factor or other, since presumably the hormone concentrations are the same on both surfaces. We need to uncover the control mechanisms which will allow us to increase bone mass.

I think it is also important that we develop new initiatives in terms of treatment of the disease, even though this is an ideal disease for prevention. Not everyone will have her bone mass maintained. Some people will not take the preventive measures. Many people are already beyond that point, and we must have more effective means to treat the individual who begins to have fractures.

We need better identification of people at high risk. We do have effective methods of prophylaxis, but they are not without risk, and we need to be able to identify that individual other than by putting her in a group of high risk. If we can develop methods for looking at an individual patient with a measurement and saying "You are at high risk of fracture," we can then apply higher risk preventive measure.

We clearly need better forms of prophylaxis. The most effective prophylaxis for bone loss over the long term is estrogen therapy, but that is not without risk, and is not acceptable to everyone in the population. We do not know the mechanism by which estrogen works. It is perhaps not a direct effect, and if we can uncover what indirect mechanism is involved, that mechanism can perhaps be applied in a safer manner to prevent bone loss.

Finally, I think it is critical that we look at the determinants of peak bone mass, how much bone you have at age 40 to 45. If that can be increased, that may be the best way to prevent subsequent fractures, and it is in this area that I think exercise and calcium or other nutritional factors may be most important. This is an important disease, an expensive disease, one that can be prevented in most cases, if we can continue our efforts to uncover its mechanisms.

Thank you very much.

Ms. OAKAR. Thank you very much, Doctor.

[The prepared statement of Dr. Johnston follows:]

PREPARED STATEMENT OF C. CONRAD JOHNSTON, JR., M.D., PROFESSOR OF MEDICINE, DIRECTOR, DIVISION OF ENDOCRINOLOGY AND METABOLISM, INDIANA UNIVERSITY SCHOOL OF MEDICINE, INDIANAPOLIS, IN

Osteoporosis is an important disease, producing morbidity and even mortality through the development of fractures, and costing over $6 billion per year by some estimates. The common fractures associated with the osteoporotic syndrome are those of the wrist, the vertebrae, and the hip. The frequency of occurrence increases with age, and the fractures are more common among women than men, especially white women of Northern European heritage. Importantly, many of the fractures are potentially preventible.

The causes for the fractures are complex, but the most prominent determinant is a decreased amount of bone—low bone mass—at the site where the fractures occur. Other variables may also be important, since all elderly persons have low bone mass compared to that present during youth, but not all fracture. These variables could include other diseases of the bone such as osteomalacia, and the frequency and severity of trauma; for example, the type of falls which occur. Such other mechanisms for fracture provide an important area for further research and for potential reduction in fracture incidence; nevertheless, low bone mass is probably the dominant determinant.

Low bone mass among older persons is determined by two variables: (1) the amount of bone present at maturity (at about age 40), and (2) the subsequent rate at which bone loss occurs. We do not know which of these variables is dominant, and this dominance may vary from one individual to another; that is, high bone mass at maturity is generally protective, but some individuals with high bone mass may lose sufficient bone to fall into the fracture-risk range.

My laboratory has been interested in patterns of change in bone with age. Such research has been made possible because of the development of new techniques for measuring bone mass accurately and precisely. Initially, we used single-photon absorptiometry to measure changes in the radius. Subsequently, we have utilized dual-photon absorptiometry to measure changes in the spine and the hip.

We have determined, at least for the radius, that bone loss begins at age 45 to 50, is accelerated at menopause, and subsequently slows. There is considerable difference in rates of change between different individuals, and those with the greatest initial bone mass appear to lose at a more rapid rate. Thus, although a large skeleton at maturity offers some measure of protection, it is possible to lose at a sufficiently rapid rate to fall below the theoretical fracture-threshold. If all individuals lost bone at the same rate, as has been proposed by others, then a measurement of bone mass at maturity could predict who was at greatest risk later in life; but unfortunately, this proposition is not true.

Measurements of the spine and hip have been done for only the last few years, but it already seems clear that changes at those sites may differ from changes which occur in the radius.

We know that there is an accelerated loss of bone at menopause, and that this loss can be prevented in most women by estrogen replacement therapy. We also know that different individuals lose at quite different rates, but we do not know why these differences exist. Perhaps those with the lowest residual estrogen concentration (all postmenopausal women still produce some estrogen) lose at the most rapid rate. If this assumption is true, then we could identify the population at greatest risk, and provide estrogen replacement therapy only to those subjects.

Several years ago, we undertook a prospective study of a group of women going through menopause, measuring estrogen dynamics and changes in bone mass. Preliminary data suggest that those with the lowest residual concentrations do indeed lose most rapidly. Yearly changes in bone mass are small, and it takes some time to be able to arrive at a reasonable conclusion concerning factors affecting these rates. This study was funded by the National Institute on Aging (NIA).

Recently we have undertaken several prospective studies, again funded by the NIA, to look at some of the other determinants of bone mass in the elderly. We will continue our studies on early menopausal women, but in addition, we will add a group aged 40 to 45, since it appears that bone loss from the spine starts at that time. We will determine whether that loss could be related to changes in estrogen production occurring before menopause. In addition, we will look at the effects of obesity and diabetes on bone loss in postmenopausal women. Both of these conditions appear to be protective; that is, they appear to slow the rate of loss, and we would like to know the mechanisms involved.

Our previously-done studies in twins suggest that some component of adult bone mass is genetically determined. However, it is also apparent that the environment—even the in-utero environment—may be important. Thus, we will expand our studies of both identical and fraternal twins, to further define the genetic contribution, and to look at genetic/environmental interactions.

In all of the studies mentioned, we will be looking at other variables which may affect bone loss, as well, including calcium-, protein- and caloric-intake, and exercise.

Much has been written about the effect of calcium on slowing bone loss in the elderly. Although there is still controversy here, most would agree that an inadequate intake can be detrimental to the skeleton, and many postmenopausal women have a very low intake. Little has been said, to date, about calcium deficiency and its effect on the rapidly-growing skeleton (the teenage growth-period). Certainly many teenagers do not attain the RDA for calcium during those years (1200 mg/day). In order to investigate this problem, we will again use the very efficient twin-model. One identical twin will be given a calcium supplement and the other, a placebo. Both will, of course, remain on their usual dietary intakes. Thus, we should be able to detect any effect the additional calcium may have had on skeletal growth.

We have learned a great deal about bone loss and osteoporosis over the past decade. Methods have been developed which accurately and precisely measure bone mass and its change over time. We have found that all individuals do not lose bone at the same rate. Although a large skeletal mass at maturity may be protective, it may not provide sufficient protection for certain individuals. It is clear that genetics plays an important role in determination of bone mass, but environmental factors can also be quite important. It has been found that bone is lost from different sites in the skeleton—vertebrae, hip, radius—at different rates, so that a measurement at one site may not reflect what is going on at another. It is apparent that estrogen deficiency is associated with rapid bone loss, and that this deficiency can be prevented or slowed by the administration of estrogen. The mechanisms of estrogen action have not been elucidated. Finally, other variables, such as calcium-intake, protein-intake, exercise, such toxins as alcohol and tobacco may play important roles in bone loss in certain individuals.

Although much has been learned, it is apparent that much more needs to be understood before the problem of osteoporosis and its attendant fractures can be conquered. I would suggest the following areas for particular emphasis:

RECOMMENDATIONS FOR THE FUTURE

1. Studies should continue on basic bone biology. It is from this area that new initiatives will arise. We must learn what controls bone balance at the cellular level. It is known, for example, that bone continues to grow on the outside (periosteal surface) throughout life, while bone is lost from the inner surface (endosteal surface). Presumably the cells are similar, and the systemic factors, such as the hormone concentrations are the same on both surfaces. This local factor must be of critical importance. The system, clearly, can replenish itself, and we must learn how this is controlled.

2. Additional studies on the treatment of the disease are indicated. Current forms of therapy are helpful, but certainly are not adequate. Although this disease is a good one for introducing preventive measures, many people have already lost sufficient bone that they will continue to have fractures, and not all people will take preventive measures. The development of new drugs may prove valuable and should be encouraged, such as the development of the various growth factors which are now being isolated from bone. Combination forms of therapy, as in the "ADFR" scheme, also show promise.

3. Identification of high-risk patients is essential. We have effective forms of treatment which can prevent bone loss, but these are not without side effects; consequently, it is important that such therapy be given to those who will benefit most. We should look at what variables other than estrogen loss may play dominant roles in age-related bone loss. Is the residual concentration of estrogen and/or androgen important in preventing bone loss? Does calcium deficiency play a major role among some segment of the population? Are other dietary constituents important? What is the role of exercise in preventing bone loss? What kind of exercise, and how much?

4. We need better forms of prophylaxis for age-related bone loss. Estrogen therapy will slow or prevent loss in most patients, but this treatment is not without complications, and is not acceptable to all patients. A number of questions remain: Should estrogen always be given with progesterone? Is it necessary to cycle the therapy, or can low-dose estrogen/progesterone be given continuously? Are there better ways to

administer estrogen, such as transcutaneously? Since estrogen appears to act indirectly on bone, perhaps its mechanism of action can be uncovered, and other therapeutic agents introduced which do not have the complications of estrogen. For example, is calcitonin effective in preventing age-related bone loss? If it is, new methods to administer this drug must be developed before it can be widely utilized. It is also important to better define the role of calcium supplementation and exercise in the prevention of bone loss.

5. Finally, I believe that we should place considerable emphasis on the determinants of peak bone mass. This may be the most effective way to protect the population from osteoporotic fractures. During the acquisition of skeletal mass, nutritional deficiencies may play an important role. For example, the RDA for calcium during the teenage years is 1200 mg/day, and many young people in the United States do not attain this level. Exercise may play its most important role, as well, during this period of rapid growth. It is essential that we have clear evidence for the effectiveness of all agents to be used here, and safety is of paramount importance.

Osteoporosis is an important disease affecting 15 to 20 millions of persons, causing prolonged disability and even death in some, through the development of fractures. Many of these fracture-events are potentially preventible, if proper measures are taken early in life, before bone is lost. We have learned much over the last decade because of new technologies which allow us to monitor carefully changes in bone mass. With continued support for research, we should be able to eliminate many of these fractures among the elderly.

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Ms. OAKAR. Ms. Leonard.

STATEMENT OF VICTORIA LEONARD

Ms. LEONARD. I am Victoria Leonard, executive director of the National Women's Health Network. Thank you very much for inviting us to speak today.

Ms. OAKAR. You know, this is a kind of historical moment, because I do not think you will have too many hearings where you have four Congresswomen conducting the hearing. It is kind of interesting. We are real happy to have you.

Ms. LEONARD. It is no accident what the topic is, either.

We are a public-interest membership organization which seeks through an integrated program of education, organizing, and advocacy to give women a voice in the health care system in the United States.

We very much appreciate your holding hearings on older women's health, an area of major concern to the network.

Our public education and advocacy efforts on behalf of older women have included campaigns to reduce unnecessary surgery, such as mastectomy and hysterectomy; to protect the rights of women in nursing homes; to offer information on the preventative aspects of osteoporosis such as nutrition and exercise; to help women prepare for the natural process of aging and reduce society's "medicalization" of aging.

I am here today to urge the committee to recognize that coronary heart disease is the No. 1 killer of women over 55. The commitment of resources and expertise in this area is critical.

Key to reducing the incidence of heart disease in women is the support of additional research using women as subjects for clinical trials, and the expansion of public education programs, particularly for high-risk groups.

Coronary heart disease is popularly thought to be a disease of middle-aged men.

Ms. OAKAR. Let me just if I might real quickly stop you there. I was struck by something Dr. Williams said earlier, and that was that is one of the tests they conducted, NIH did not use women, and now are using women. Is that a pattern? Is that a problem, that women are very often not used in some of these studies?

Ms. LEONARD. Right, much of the research on heart disease was conducted on men and has since been extrapolated to women. There was recently—last week in fact—at the Heart, Lung, and Blood Institute, several workshops on heart disease and women. What came out was that yes, not nearly enough research has been done.

Most people are surprised to learn that 300,000 women die from coronary heart disease every year. In fact, it accounts for one-half of all female deaths in the United States.

Because of this, we believe that research should continue to look at the particular needs of women. Much of the data concerning women and heart disease has been extrapolated from research conducted on men, as you mentioned, and yet there are significant differences. We develop atherosclerosis differently. Our natural estrogen seems to have a protective effect. And when we have diabetes we have a far greater risk of heart attacks than men who suffer from diabetes.

Recently, the National Institutes of Health sponsored workshops on coronary heart disease in women.

There, Dr. Lynn Rosenberg of Boston University reported that the major risk factors for heart disease affecting women included hypertension, elevated serum cholesterol levels, and smoking.

Hypertension, or high blood pressure, affects 20 percent of American women over 55. It is also directly related to stroke, which is the third leading cause of death among older women. According to NIH, only 17 percent of those women suffering from high blood pressure have their medical problem under control.

Elevated levels of cholesterol in the blood are found in 15 million women. Women below the age of 45 have lower levels of cholesterol than do men. However, from age 45 to 55, the levels of our cholesterol reach greater levels than those of men.

Smoking among women is more prevalent now than 50 years ago. A quarter of adult women smoke, although 80 percent of those women wish they could quit. Women smokers are two to six times more likely to suffer a heart attack than nonsmoking women. Recent studies have indicated that women who smoke and use oral contraceptives increase their risk of heart disease from 10 to 39 times while using oral contraceptives.

Another factor affecting cardiovascular disease is stress. While it is commonly thought to be the problem of the powerful, successful executive, a study of primates found that it was the most subservient apes which suffered the most stress. Women in the pink-collar fields, and especially working mothers, are those who may well be

suffering the most stress in our society. Yet, they are not the subjects of clinical trials. Since the family is becoming increasingly important in our national policies, what could be more supportive of the family than keeping the working mother from being debilitated with chronic heart trouble? This is why we are requesting studies which include women from all socioeconomic strata and, most particularly, those women with the dual responsibilities of family and employment.

In addition to the risks of health factors, there are special ethnic populations who are at increased risk of heart disease. NIH has found that the chances of a black woman developing coronary heart disease are two to three times greater than a white woman. Black women are also at a higher risk for hypertension.

The little research done on Asian and Hispanic American women indicates that these groups are at a higher than normal risk for high blood pressure.

Women with diabetes, according to Dr. Clarkson, have a three to five times greater chance of developing heart disease, while diabetic men face an increased risk of one to two times. This affects 3.3 million women over 45 who have diabetes.

Clearly, clinical trials with women as subjects are needed, trials encouraging preventive measures as well as trials evaluating treatment by drugs or procedures. Special populations, especially high-risk ones, must be included in these studies.

For example, there is some evidence that normal estrogen may have a protective function with regard to cardiovascular disease. More research is needed to examine how these hormonal factors affect the dietary cholesterol and the way it is converted into serum cholesterol and the way our bodies metabolize and distribute medications, especially as this relates to hormonal factors.

In terms of surgical treatments, it has become increasingly apparent that coronary bypass surgery, an operation on the rise for both sexes, poses a greater risk to women, who do not fare as well as men afterward. Why this is so is not entirely clear, and must be taken into consideration in evaluation of this procedure.

Additionally, research needs to be conducted on the degree of disability suffered by women with heart disease. Living with a chronic disease is a long-term, costly process. The value of identifying better alternatives has been proven time and again. Yet there is an absence of pilot projects in this area.

We urge that public education should continue to inform women of their risks of heart disease and what they can do to reduce them.

Hypertension can be controlled by reducing salt intake. The Food and Drug Administration's pilot project to encourage the black community to use less salt reached four cities for only $100,000. It has now been adopted by the State of Virginia, and is a good example of innovative public education programs the Federal Government can provide citizens which will have long-term benefits.

Cholesterol levels can be reduced by cutting back on the amount of dietary saturated fat one consumes. And we laud the Government for the steps it has taken in beginning to incorporate that message in its dietary publications for the public. We urge the Government to strengthen that message.

To combat the aggressive marketing by tobacco companies toward young women, the Federal Government will have to escalate its Public Education Program on the risks to women of smoking. Through the years the Federal Government has been a leader in the battle against smoking. Now it is time for Congress to join that effort by analyzing if the health of America can truly afford to continue the tobacco subsidy.

Above all, women need to know that although their overall risk is lower than men, they can develop heart disease and related cardiovascular diseases.

To briefly summarize, we ask the leaders here today to consider the long-term costs, both emotional and financial, of women's cardiovascular disease, and to support public education and increased research. We would like more research on prevention trials and treatment trials. We would like more research on the special concerns of those women at high risk, such as black women and diabetic women.

We know that prevention is the easiest solution. We hope that you can create Federal policies and Federal budgets which will make that a possibility for the millions of American women who are at risk for cardiovascular disease.

Thank you.

Ms. OAKAR. Thank you very much.

Dr. Verma.

STATEMENT OF SATYA VERMA

Dr. VERMA. Thank you, Madam Chairwoman.

My name is Satya Verma, and I am director of community eye care services and external residencies at the Pennsylvania College of Optometry in Philadelphia, and am also a practicing doctor of optometry. At the Pennsylvania College of Optometry I am an assistant professor with a special interest in vision care for the elderly, and currently teach courses in geriatric optometry.

The American Optometric Association appreciates this opportunity to assist the House Select Committee on Aging's Task Force on Social Security and Women in its concern for vision impairment among elderly women. This issue is an important one, and we would like to commend the task force for taking an active interest in it.

My statement will cover these salient three points:

One, an overview of the visual needs of the elderly, with particular emphasis on older women.

Two, description of a Free Health Promotion and Preventive Eye Care Program for the elderly which has been initiated by the American Optometric Association.

Three, a summary of the special problems of eye care accessibility and coverage under Medicare under existing laws.

I have submitted my testimony for the record. However, I would like to highlight and add certain points.

Ms. OAKAR. We appreciate that. Without objection, we will submit the whole testimony.

Dr. VERMA. Madam Chairwoman, as you are well aware of the positive effects of longevity on the Americans—that is, we are defi-

nitely living longer—these effects are significantly important for women. Whereas today there are about 145 women to 100 men over the age of 75, by the year 2000 this ratio will be 170 to 100. In the context of this overall increase in the number of all elderly, this ratio is going to be playing a significant role in the near future.

As concerned vision care providers in the overall health delivery system for the elderly, my colleagues and I are deeply committed in meeting the unmet visual needs of the elderly. Therefore, the American Optometric Association has made one of its top priorities addressing those issues that are involved in safeguarding the visual well-being of older adults.

To elaborate my first point, let me state that next to death, older persons greater fear is going blind. While blindness is a genuine concern, a great deal of fear, however, is needless and avoidable. Problems in the area of vision affect almost every older adult, regardless of sex. The National Center for Health Statistics data reveal that approximately 92 percent of males and 95 percent of females wear corrective lenses. This number could be as high as 99 or even 100 percent if all who needed some kind of vision correction were wearing lenses.

No other problem of old age can claim to affect that many people, and yet keep them functional. Even with these staggering numbers and their impact on the daily living of the elderly, proportionate efforts on the part of the Government, the private sector, the consumer, and even the providers are negligible and definitely need reevaluation.

With the current limited knowledge and understanding of gerontology, myths and misconceptions still dominate the aging network among providers and consumers alike. Certainly the area of vision is no exception.

As I stated a moment ago, the fear of going blind is a foremost concern for the elderly. However, in a recent study I conducted examining nonambulatory elderly was itself an eye opener. This elderly population is composed of those who have multiple health problems and are so-called shut-ins, either in their homes and/or nursing homes; 80 percent of these patients were women, and about 77 percent of these patients had good, usable, functional vision. An additional 15 to 20 percent could be helped with some kind of low-vision device or aid. This means that there were less than 10 percent who can be considered blind: either legally blind or having severe vision loss. The remaining 90 percent of the elderly can heave a collective sigh of relief that they are not blind.

Before I came here last evening I had the pleasure of examining my youngest patient of the day, a 78-year-old young lady who was homebound because she had a stroke last August. As a result of the stroke she complained of not being able to see completely from her left side. If she was looking at you, probably she would miss half of your face, and what she saw was not very clear.

Fortunately she was one of those patients that we were able to help. By the time we left her place she was seeing comfortable 20/40 vision, and she should be able to enjoy television viewing and be able to read as small a print as you and I are able to do without much discomfort.

This brings me to my second point, which is that the timely screening and detection of vision and eye problems, and educating older adults about proper and timely care can thereby alleviate unfounded fears. This means creating a health care system with appropriate health promotion, prevention, and education, as you have yourself so eloquently stated earlier.

To address this problem, the American Optometric Association in 1983 initiated a Preventive Eye Care Program to provide older adults screening and education. Over 64,000 senior citizens have benefited so far from the program. The program has received citations from President Reagan, the National Council on the Aging, and the vision care section of the American Public Health Association.

We are indeed proud of our limited efforts in this area. AOA and our volunteer sector throughout the Nation are evaluating ways to improve upon this initiative. Screenings and education about preventive vision care can be fruitless and lose momentum when the followup care to back up these efforts cannot be easily obtained.

This brings me to my third and final point, that of Medicare's current practice of limiting access to eye/vision care services. Unfortunately, current Medicare law discriminates against elderly patients needing vision care who receive it from a doctor of optometry. Medicare policy limits accessibility, leads to procrastination, inconvenience, and in some instances may lead to unnecessary and avoidable blindness, especially in the rural areas across the land.

The concept of optometric parity under Medicare makes more sense in the current financial austerity and cost-cutting mood prevailing both in the Congress and in the White House. That is, by encouraging preventive care, as you suggested earlier, we will be cutting down and reducing catastrophic problems requiring more severe medical attention and which also make it very expensive in the long run.

Although loss of vision has a drastic effect on daily living, it is not life threatening. People do not die because they cannot see—therefore it does not receive appropriate attention. A few minutes ago you stated that the poverty level of women, and especially older women, is such a high rate. I want to point out that simply because older women in America are proportionately greater in number in terms of poverty, this does not mean that they should be deprived of good vision.

Congress has attempted to address this problem through a provision establishing optometric parity contained in the conference agreement of the budget reconciliation, which is currently awaiting final action. I would like to especially thank you, Congresswoman Oakar, for cosponsoring this legislative proposal and for your continued support for optometric parity. Hopefully, favorable action will be taken in the near future on this reconciliation package and senior citizens will have the access and freedom to choose the vision care provider of their choice.

The aging of our population, and women in particular, presents many exciting challenges to optometrists and all other professionals that provide older Americans with opportunities for leading productive lives. The American Optometric Association congratu-

lates this task force for your effort to gain better understanding of the vision problems associated with aging.

I will be glad to answer any questions, but before I do I want to say something about the link between falling due to osteoporosis, and where vision fits into this category. I know we heard a great deal this morning about osteoporosis and how the elderly and especially older women fall, but I have not heard a single word being mentioned that vision is clearly associated with this problem.

There is a physician in California who has been doing research about falls by the elderly, which is partially funded by the National Institute of Aging. He has pointed out that while osteoporosis is a significant factor, in at least 20 to 25 percent of falls, poor vision contributes a great deal to falls.

Another factor which we cannot ignore, and which I have personally witnessed, having visited thousands of senior citizens in the Greater Philadelphia area, is the poor lighting conditions of older homes. If that is any representation of the situation across the land, I can tell you that the poor lighting conditions and environment these older people live in is also a great contributor to many of the falls the elderly take.

Thank you very much.

[The prepared statement of Satya Verma follows:]

PREPARED STATEMENT OF THE AMERICAN OPTOMETRIC ASSOCIATION PRESENTED BY SATYA VERMA, O.D.

Madam Chairman, my name is Satya Verma, and I am Director of Community Eye Care Services and Residencies at Pennsylvania College of Optometry (PCO), in Philadelphia, Pennsylvania and am a practicing doctor of optometry. At PCO I am an assistant professor with specialization in vision care for the elderly and currently teach courses in geriatric optometry.

The American Optometric Association appreciates this opportunity to assist the House Select Committee on Aging's Task Force on Social Security & Women in its concern for vision impairment among elderly women. This issue is indeed an important one and we would like to commend the Task Force for taking an active interest in it.

My statement will cover the following points:

1. An overview of the visual needs of the elderly, with particular emphasis on older women.
2. Description of a free health promotion and preventive eye care program for the elderly initiated by the American Optometric Association, and,
3. A summary of the special problems of eye care accessibility and coverage under Medicare.

OVERVIEW

Aging is a daily reality for the American society as a whole. The fastest growing population unit in this country is the geriatric population with its special needs. Within this century, the number of elderly has increased more than seven-fold. One in every nine Americans is 65 or older. The fact that this population continues to grow is one of the triumphs of modern health care. By the year 2010, one-fifth of the people of this country will be 65 and older.

Because the life expectancy of women is greater than for men, the health, social, and economic problems of the elderly, especially those over 70, are also mostly the problems of women. Elderly women now outnumber men three to two. Generally, old age is associated with one-person, female households, reduced income, increased poverty, and greater risk of ill-health, death, and institutionalization.

Hardy and Cull[1] note that "older people are not the lost generation but a generation whose day did not arrive. This segment of our population is angered, bewil-

[1] Hardy, RE, Cull, CC: Organization and administration of Services Programs for the Older American. Springfield, Il., Charles C. Thomas, 1975.

dered, concerned and groping for a meaningful place in society." It has been reported that in many cases, geriatric patients labeled as senile, reclusive, bothersome, or irritable, actually have vision problems which affect their behavior. Once the problems are corrected with proper vision care, the patient's behavior often changes remarkably for the better.

Thus, at a time in life when sensory functions begin to deteriorate and fail, vision gains new importance to the life of the elderly individual. Vision is a major means of insuring communication with the outside world and contributing to independent living.

VISUAL NEEDS OF ELDERLY WOMEN

Statistics reveal that at least 85 percent of all injuries sustained by persons 65 and older are caused by falling. Twenty-five percent (25 percent) of these accidents are attributable directly to uncorrected visual problems. While 75 percent of the over 65 age population suffers from at least one chronic health condition, 48 percent specifically suffer from poor vision.[2] Also, 68 percent of the elderly with one or more chronic health conditions judged their own vision as poor. It is also well known that the incidence and prevalence of eye diseases significantly increases with age.

The vision care needs of women are a significant component of the overall health and welfare of the elderly, and this is a vital area that needs more public attention. In addition to the purely refractive problems of the elderly, the National Center for Health Statistics (NCHS) also recently concluded that vision impairments are the third highest chronic health problem reported in interviews with persons 65 years and older.[3] Only arthritis and hypertension have a greater prevalence than vision impairments.

NCHS also concluded that for the retired population, vision care examination visits decreased by 50 percent from pre-retirement levels. This decrease in vision care occurs at the very time when a variety of vision problems may be most probable and when inadequate vision may be most debilitating to the person as a whole. Lack of vision care is partly attributable to financial considerations, however lack of interest, knowledge, understanding and sensitivity among health professionals also seems to be a significant factor.

The landmark Framingham Eye Study revealed some interesting differences between elderly men and women in the prevalence of four major eye diseases and the best level of correctable vision that can be attained. For those aged 65-74, 95.3 percent of the men were correctable to excellent acuity (20/10-20/25), compared to 89.5 percent of women.[4] Using NCHS data for the same age group, we find 92 percent of men wear corrective lenses verses 95 percent of women. This research raises the question "Why do more women wear glasses but have worse vision?"

While the Framington Study data for diabetic retinopathy and open-angle glaucoma indicates no statistical difference in the levels between men and women, there is a statistically higher prevalence rate of macular degeneration in women compared to men. In the age group 64-74, the prevalence of macular degeneration is 12.6 percent for women versus 8.8 percent for men. Similarly, in the age group 75-85, 30.1 percent of women versus 24.4 percent of men are afflicted with this eye disease. Also, the data on senile cataract indicates that women have higher prevalence rates in every age group, however the differences are within reasonable limits of chance fluctuation.

The current knowledge and understanding of gerontology is limited, and what does exist is often based on myths and misconceptions. Old age generally is associated with sickness, blindness, nursing homes and institutionalization. However, actual statistics clearly demonstrate that the assumptions are generally wrong. As you know, only 4 percent to 5 percent of the total elderly population is chronically ill and lives in nursing homes or institutions.

I recently conducted a study of non-ambulatory elderly persons which revealed that contrary to popular belief, the majority of elderly can maintain good visual functioning. Of the 468 older patients examined in both home and institutional set-

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[2] Estimated Number of Persons Discharged from Short-Stay Hospitals with Eye Disease or Injury as the First Tested Diagnosis by Age, Sex, Diagnosis. Hospital Discharge Survey, Series 10, No. 107. U.S. Dept. of Health, Education and Welfare, National Center for Health Statistics, 1972.

[3] Current Estimates from the National Health Interview Survey: 1982. Vital and Health Statistics, Series 10, No. 150, U.S. Dept. of Health and Human Services, National Center for Health Statistics, 1985.

[4] Kahn, HA, et al: The Framingham Eye Study. Am. J. Epidem, Vol. 106 (1): 17-41, 1977.

tings, 57 percent had near normal functioning corrected vision, and another 20 percent had good usable vision with spectacle correction. An additional 15-20 percent could be helped with some kind of low vision aid. Cataracts were the single most prevalent cause of reduced vision of the remaining elderly. The number of people whose vision could not be helped at all was very small.

Given today's topic it is interesting to note that 80 percent of the patients examined in this study were female and 93 percent were over age 60. If these results are any indication of the overall trends of the visual health of all the elderly population, it safely can be said that the great majority of older people maintain good usable vision. Without question, professional eye care is clearly an essential element in the total health care of the elderly.

OLDER ADULT SCREENING PROGRAM

Health promotion, prevention, and education are three areas which can potentially ease the growing financial strain on our health care system while improving the health status of the elderly population. In 1983 the American Optometric Association initiated a preventive eye care program for elderly citizens, the Older Adult Screening Program (OASP). This program encompasses both vision education and screening and utilizes the advances in visual science and preventive eye care that make it possible for most people to maintain good vision.

Since its inception, over 64,000 older adults have participated in the OASP program. Last year President Reagan awarded AOA a Private Sector Initiatives Citation for establishing the OASP. In announcing this award, the President called OASP a "thoughtful and humanitarian effort to aid our senior citizens."

The OASP screening process includes an assessment of personal health, eye care history, visual acuity, eye health, intraocular pressure, as well as a review of the screening results and history. Additional procedures, such as retinoscopy and blood pressure screening, also is done in some locations. Referrals are made to appropriate sources of care (e.g., optometrists, ophthalmologists, general physicians) if required by the screening results.

Eye/vision screenings are conducted in a variety of sites, most typically in a senior citizens center or as part of a Health Fair. Implementation of the screening program is usually directed by the optometric association in each state in coordination with local optometric groups, the state agency on aging, and senior citizen centers and organizations. Since doctors of optometry practice in over 6,000 communities they are strategically located for screening as well as for diagnosis, treatment, and referral. The significance of this project goes beyond the simple detection and follow-up of eye and vision problems. It also provides health education to the elderly population, a neglected function which can have serious consequences for the well-being of our elderly population.

Many older adults do not have annual eye examinations or seek appropriate eye care when vision problems arise. Others do not recognize that their vision has changed or are not aware that eye diseases and vision conditions may have no noticeable symptoms. Some have poor health care habits while others cannot easily afford such care.

Early identification of eye/vision problems can delay, often for long periods, the loss of vision. The optometric profession plays a major and continuing role in the early detection of eye/vision problems. In fact, the Health Care Financing Administration estimates that fully 70 percent of cataract cases are diagnosed by doctors of optometry.

MEDICARE LIMITS ACCESS TO EYE/VISION SERVICES

Unfortunately, current Medicare law discriminates against many elderly patients who need vision care. With the exception of post-cataract patients (those who have had surgery to remove the natural lens of the eye), Medicare beneficiaries who currently seek care from a doctor of optometry cannot be reimbursed, even though the same services would be reimbursed if provided by a doctor of medicine or osteopathy. These Medicare patients are faced with three equally undesirable choices: pay for vision services from limited incomes, go without care altogether, or switch from their chosen vision care provider to an unknown one. The last choice is not always feasible because of the lesser accessibility of ophthalmologists as compared with optometrists, particularly in rural areas.

The concept of "optometric parity" in Medicare, which has been endorsed by a number of senior citizen and public health groups, would allow for optometric patient reimbursement for currently covered services. Implementation of this concept would not expand Medicare covered services or the scope of optometric practice. It

would simply change Medicare law to allow reimbursement of optometric services provided by an O.D. acting within his/her state license.

Congress has attempted to address this problem through a provision establishing optometric parity contained in the conference agreement on budget reconciliation which is currently awaiting final action.

I'd like to especially thank you, Congresswoman Oaker, for cosponsoring this legislative proposal and for your continual support for optometric parity. Hopefully favorable action will be taken in the near future on the Reconciliation package and senior citizens will have the freedom to choose the vision care provider of their choice.

NEED FOR MULTI-DISCIPLINARY APPROACH

Problems with vision among older women are often a key reason for the abandonment of independent living and frequently require a multidisciplinary approach to meet psychological and rehabilitative needs. We agree with the American Public Health Association that multidisciplinary efforts in caring for the elderly's visual impairment is vital so that visual needs are met within the context of the individual's daily activities.

The lack of a multidisciplinary approach in health care for the elderly is often reflected in educational and training programs for health care professionals, including optometric training. For this reason the Administration on Aging recently awarded a grant to the American Optometric Association to develop a continuing education program in optometric gerontology. The purpose of the project is to develop a training module that will familiarize optometrists with the physiological, behavioral, and psychological changes associated with the aging process. The training module will also acquaint optometrists with the skills and roles of other professionals who provide care for the elderly. The goal of this project is to integrate the delivery of vision care within the existing network of aging services in the community—including the 670 area agencies on aging. We believe this new training module will greatly facilitate this continuing process.

CONCLUSION

The aging of our population, and women in particular, presents many exciting challenges to optometrists and all of the other professionals that provide older Americans with opportunities for leading productive lives. The American Optometric Association congratulates this Task Force for their efforts to gain a better understanding of the vision problems associated with aging. I will be glad to answer any questions members of the Committee may have.

THE AGING EYES

Myth: The more you use them, the less vision you are left with.

Fact: Eyes cannot be worn out by use.

Myth: Eyes and vision always deteriorate with age and nothing can be done.

Fact: Eyes do change continually, and while certain conditions may develop, most are treatable.

Myth: Most people lose vision as they age.

Fact: The majority of elderly, with proper care, can maintain good functional vision throughout life.

Myth: Eye examinations are only needed when I cannot see well or have other problems.

Fact: Periodic eye examinations not only ensure good vision for now, but throughout life.

Myth: I will go to the eye doctor when I have Glaucoma or something like that.

Fact: It is better to find out and treat conditions like Glaucoma when it is starting, because in this case, whatever vision you lose, you cannot regain back with any treatment.

Myth: I have reduced vision due to Glaucoma, Cataracts or Macular Degeneration. Nothing more can be done!

Fact: Special Low Vision devices like Microscopic and Telescopic Spetacles can help people with reduced vision be independent and read the paper or watch T.V., etc.

Myth: You need the same amount of light to see throughout your life.

Fact: Very important to remember that older people need at least 2 or 3 times stronger light to read than younger people.

Remember: Good vision is the ally of older people ensuring their contact with the outside world through reading and T.V., especially when physically disabled.
Make sure you take good care of them. See your eye doctor periodically!

Ms. OAKAR. Thank you.

Congresswoman Schneider.

Mrs. SCHNEIDER. Thank you. I have a speech I was supposed to be giving right now, but I did want to throw in three quick questions. I wanted to touch on the fact that you mentioned that black women have two to three times higher risk of heart disease, and I wonder if we have any statistics about Hispanic women and Asian women.

Ms. LEONARD. No, we do not, and this is clearly a matter that needs to be researched. We need to begin to collect data for those groups. There is a little bit of data that indicates that they have higher blood pressure. So far no one has done any outreach to them about diet and ways of moderating their salt intake, things that would be very important to do research on.

Mrs. SCHNEIDER. But as far as you know, there is no effort now to get that kind of demographic information.

Ms. LEONARD. No, there is no effort underway.

Mrs. SCHNEIDER. OK. We will be sure to put a particular emphasis on including those specific groups.

I also wondered what could be done for diabetic women, since they have such an increased risk for heart disease.

Ms. LEONARD. We would like to see it be a part of Federal programs about diabetes and women. For an example, the brochures on diabetes do not mention that women who have diabetes are far more vulnerable and should look at their diet in terms of fats and exercise and all of the other ways that one can lead a more careful life in terms of heart disease.

Mrs. SCHNEIDER. Are there any particular elements that are involved in stress that are real good predictors of heart disease?

Ms. LEONARD. Traditionally, we thought about it in terms of the successful, the high powered, and they did do a Federal study about the very successful Federal executive women, GS–14's, 15's, and 16's. They found that success does not kill women.

Mrs. SCHNEIDER. Good.

Ms. LEONARD. What we are concerned about is that there is primate work that indicates stress is very bad, but that the subservient females in a primate group are the ones that are developing the problems, the cardiovascular troubles. Therefore, we would like to see studies on the GS–2's, 3's, and 4's in the Federal Government, groups that have not been studied.

Further, I would like to add that we would like to see physicians and other health-care providers do more screening for women as they treat them, whether it is gynecologists or whatever primary health-care provider. This screening should include diabetic women, women on oral contraceptives, Asian, black, and Hispanic women, on being high risk for heart disease.

Mrs. SCHNEIDER. I think it is critically important that all of you researchers or public interest activists keep in mind that despite the fact that we have the scientific studies that seem to focus in on, for example, heart attack, heart disease, diabetes, or whatever, all too often there is a failure to look more closely into the psychologi-

cal impact, and it seems to me despite the fact that study was done on women in high-powered jobs and the degree of stress they might be exposed to, it seems pretty obvious to me that there is an enormous amount of stress among housewives and people who have suppressed ambitions, suppressed desires, and that that suppression can be obviously more impairing to one's health than can exertion through stress, which is sometimes a form of relief. It seems to me to be an obvious element of research that is really necessary, so I hope that all of you will make sure that we take into consideration all those elements so that we can have more conclusive research data.

Thank you.

Ms. OAKAR. Thank you very much, Congresswoman.

Congresswoman Bentley.

Mrs. BENTLEY. Thank you, Madam Chairman.

Dr. Johnston, I am very interested in all of the research programs that you are doing. I think it is going to be a tremendous asset in the informational field in what we do.

Do you think that there has been enough let us say publicity, public relations or whatever you want to call it among the people, among the young people, among older women, about osteoporosis and what it means and what can happen if you do not do certain things?

Dr. JOHNSTON. Certainly in the last year, 2 years since the consensus conference, there has been a great deal of public information available for the older individuals, for the public at large. It is only now reaching that population, however, and I am sure there are instances in which the information is not available. It is only now getting into doctors' offices where you can find brochures for the public. There is very little available for growing children. Really we have only meager information about how important nutrition, for example, and exercise may be at that age.

On the other hand, the kinds of nutritional initiatives that I would favor are very low risk. There are already recommendations in existence for the RDA for calcium, for example, and I think that that is an area where more information should be forthcoming and there is practically nothing available.

Mrs. BENTLEY. OK, you say RDA for calcium. Who is telling our young people—and you said that the important time was up to age 25 for their bone mass—who is telling our young people about the importance of nutrition? I think nutrition—I mean, this is my opinion—that there is such a lack of understanding and such a lack of salesmanship on the importance of nutrition throughout this country that it is one of our biggest failings.

Dr. JOHNSTON. I would agree entirely.

Mrs. BENTLEY. What can we do, especially to our young people in school, what can we do about that? I mean, you know, we are spending all this time on sex education, but I would like to bet that there is not one-tenth the effort made of selling nutrition and letting them know how important this is going to be instead of going across the street to Burger King or McDonald's or somewhere every day.

Dr. JOHNSTON. I would agree. I do not know how to reach teenagers in my own family. My teenage daughter never drinks milk, you know.

I think it has to begin in the schools, at home, with education of the public. Teenagers appear to behave primarily on the basis of peer pressure. If we can get some teenage peers to say "calcium is good," I think we will be much better off, but that is a very difficult problem.

Mrs. BENTLEY. Maybe that is what we can do, get some of these popular young people like we have had for other programs, and on the smoking and some of the others, and sow some of that. I think it is so important, especially with the increasing age of our population.

Thank you.

Ms. Leonard, is there anything that health providers can do, in your opinion, about the heart disease for women; letting them know that they are more subject to heart situations? Is there anything else that we can do?

Ms. LEONARD. Sure. I think that we have to encourage health providers, one, to talk with their patients. I think women do not know that we get heart attacks. We know that men get heart attacks, and we have been careful about their diet. So I think the health care providers have to talk—you just mentioned—about nutrition; that is one thing. They have to mention to their women patients about nutrition and that women too, should eat a low-fat diet. Women should also watch their salt intake, and health care providers should screen, whether they are a gynecologist, a nurse-practitioner, whatever, their patients for those who are at risk.

So that if they are seeing smoking women, and since a quarter of all women smoke, that is a good number of their patients; then should mention to them that yes, they are drastically increasing their chances of heart disease. When they see women with diabetes, they should tell them they are at increased risk, and help those women patients change their lifestyle so that they can minimize their chance of heart disease.

Mrs. BENTLEY. Have you had the opportunity, or made any effort to study what Gramm-Rudman might do on research?

Ms. LEONARD. We have talked to the Institute; NIH—blood, lung and heart, and they say it is too soon to tell, but as Representative Oakar mentioned, research tends to be the first to go. We do know that at the Food and Drug Administration, their advisory committees are going to be cut 60 percent.

Ms. OAKAR. I will tell you, that really kills me. Because if anything, they need some help over there. I think they could clean out some of the help they already have, but I do think that they—but that is a critical problem. We have all these drugs on the market, all these diet pills and all these kinds of things they have, that they do not do any postresearch on at all. We are really being totally ignorant in terms of our priorities, and I know that I am going to be joined by my colleagues in trying to do something about that.

I did not mean to interrupt you, but when you mentioned 60 percent at the Food and Drug Administration, that just sort of heightened my interest.

Ms. LEONARD. We do fear that research will be the first thing cut, Representative Bentley, because most of the Federal organizations are holding, trying to hold staff and not let staff go; so that means it will be grants to universities and there women have not been a high priority in the past. We are concerned that they will certainly not be a high priority in the future.

Mrs. BENTLEY. Well, we will have to turn that around and make them a high priority, won't we?

Dr. Verma, I was particularly interested in your statement that Medicare coverage does not include visits to optometrists, and what can we do to change that?

Dr. VERMA. That is a one-line answer. If Medicare starts covering them through legislation which is already in the process, I think that would definitely change the situation considerably, and more people will be able to utilize vision care services more readily and faster.

Mrs. BENTLEY. Where does that stand, Madam Chairman?

Ms. OAKAR. My colleague is referring to a bill that I have that would include that. We are having hearings—it is one of the bills that Congressman Waxman is interested in, so I am glad to hear that. I still think the issue is correct.

Mrs. BENTLEY. Thank you. That was some very important information we had from this panel.

Ms. OAKAR. I want to ask Dr. Johnston a little bit about the labor force.

Have you done any research relative to whether women are in the labor force or not in the labor force with respect to whether or not they get osteoporosis?

Dr. JOHNSTON. I am unaware of any information on that particular question.

There is a large publication, an epidemiological book listed on my written testimony, which has data that have been collected by the American Academy of Orthopaedic Surgeons, but I do not recall any particular——

Ms. OAKAR. My interest is in the environment. Whether or not environment plays a role in whether or not one contracts these diseases or is more susceptible to the diseases. I know that is a more subtle interest when you are really at the hard core of research.

Dr. JOHNSTON. There are very few data. I think Dr. Williams touched on the question of activity, and that is where I would suspect it would have its role; but toward that specific question, I think there is very little solid information.

Ms. OAKAR. Let me mention one thing to Ms. Leonard. I was very glad you talked about the need to include women in the research, because it is different just as we ought to have studies on men and types of men, we certainly ought to include gender as one of the subjects of research.

I wanted to tell you that in our little discussions up here, we are going to join together and ask NIH to always include women. I mean, it is inconceivable that they would not do that; but it does not surprise me, either, although I am a fan of the research that is networked through them, and I do not want to be critical about it to the extent that it gives the administration more excuses to cut their funds.

I was surprised you did not mention very much about breast cancer, which is a close second if it is not neck and neck with heart disease. It does not mean that we do not concentrate on the area.

I was interested in the whole subject of estrogen, of course, relates to that, and women are really confused about—they know about prevention and so on, and there is a lot to that, but that disease is very chronic—people are victimized as much today as they were 50 years ago. You know, the number of breast cancer victims is 20 times more than people who have AIDS—and yet that is not a national priority in terms of research and getting some kind of cure for it.

Is your organization into pushing forward in that area?

Ms. LEONARD. Yes.

Ms. OAKAR. It is certainly a disease that most women are afraid they are going to get.

Ms. LEONARD. Right, we are very concerned about it and want to encourage women not to only look at the detection programs; breast self-exams and mammograms, but also to look at the prevention in terms of dietary factors; that a high-fat diet, the diet low in fiber does seem to be a major factor in breast cancer, so we will be working, encouraging women to look at both sides.

We are certainly concerned about treatment; that women be offered the full menu and not just talked into major surgery always.

Ms. OAKAR. We have a couple bills that relate to that; that women ought to be told what options there are, if there are any, and we have heard a lot of horror stories.

One other thing, Dr. Johnston, what are some side effects of estrogen when you treat people with that? You mentioned that, and I just wondered.

Dr. JOHNSTON. The one which appears to be of greatest concern is the incidence of carcinoma of the uterus, certainly if the increased estrogen is not used with progesterone. The question of carcinoma of the breast has been raised; there are innumerable publications. I think the majority opinion currently is that there is probably no increased incidence, but that there may be in some high risk populations; and the disease is so common that that would be lost in the large number of patients.

So that is still something that people are concerned about. The issue of gall bladder disease, the problem of bleeding and unacceptability by the patient, the necessity of having D&C's and retention of fluid. There are a number of potential side effects that make it unacceptable to some patients, and probably contraindicated in some patients.

Ms. OAKAR. Are you the recipient of a grant relative to the study of this disease, from the Federal Government?

Dr. JOHNSTON. Yes, I have two grants in the area of osteoporosis from the National Institute of Aging.

Ms. OAKAR. Would you be able to delve into your research to the same degree without those grants?

Dr. JOHNSTON. I would not be able to do my research without those grants. I have some local support, but it just cannot be done without NIH support.

Ms. OAKAR. Thank you.

Dr. Verma, I happen to agree with you about the need to include vision as routine vision care, as part of the Medicare Program, and I do think there is a relationship with other diseases if you do not have access to seeing well. So I totally agree with you, and I want to thank the panel very, very much. Thank you.

Our last two panelists are Ms. Jean Bennett, who is with the American Association of Retired Persons, their health advocacy services, and she is from my home town, Cleveland, OH. We are always happy to have somebody from Cleveland, which is a great area for medical research and development. And Jane M. Deren, Ph.D., who is the director of women's programs for the National Council on Aging.

We are delighted to have you both here; you are both with really wonderful organizations. I want to say that. There are times when we criticize special interest groups. Personally, I think that is just a cliche now that has very little meaning—but if you are a special interest group, I am all for you. I think it is terrific.

I am happy to have you here, Jean. Would you like to begin?

STATEMENTS OF JEAN BENNETT, AMERICAN ASSOCIATION OF RETIRED PERSONS, HEALTH ADVOCACY SERVICES, ACCOMPANIED BY CHRIS McENTEE, LEGISLATIVE REPRESENTATIVE, AARP; AND JANE M. DEREN, PH.D., DIRECTOR OF WOMEN'S PROGRAMS, NATIONAL COUNCIL ON AGING

Ms. BENNETT. Thank you. On behalf of the American Association of Retired Persons, AARP, I thank you for this opportunity to highlight AARP's educational activities relating to the prevention, diagnosis and treatment of illnesses prevalent to midlife and older women. My name is Jean Bennett, and I am a volunteer in AARP's Health Advocacy Services Program.

AARP is the Nation's largest organization of older Americans with a membership of nearly 22 million older persons. AARP has made a strong commitment to midlife and older women's health issues. Under the aegis of AARP's health care campaign and women's initiative, AARP is active in numerous research, education, and advocacy efforts. We have developed and distributed slide tape programs and brochures on a variety of health issues.

Late in 1985, AARP published a study delineating the extent of older women's dependency on Medicare to finance their health care. A companion study on Medicaid dependency will be released in 1986.

Today, I would like to describe AARP's national education campaign on the prevention and treatment of osteoporosis, a disease of particular interest to this task force. To complement private section actions such as ours, AARP urges that Congress launch a major public health campaign on this issue.

Until recently, osteoporosis was rarely heard of among the general public, greatly understood. Many people could barely pronounce the word. It was generally thought that our grandmothers naturally developed brittle bones as they grew older. Osteoporosis is indeed a gradual thinning of the bones which makes them susceptible to fractures, but the condition can be diagnosed much earlier, and it is usually diagnosed and it can be prevented and treated.

Most common to white or Asian women over 45, osteoporosis poses a serious threat to one-fourth of women over 40 years of age, amounting to 15 to 20 million older Americans. Many people are shocked to learn that in the United States, the disease costs an estimated $6 billion in health care expenditures annually.

Many older women are unaware of this major public health problem. Then as they reach the age when they are likely to develop the condition, they are frightened to learn that the disease can be fatal when debilitating hip fractures leave a person bedridden. The resulting isolation, depression, and malnutrition can end in death. Mortality during the year following a hip fracture may be as high as 15 to 30 percent in the United States, usually caused by such complications as pneumonia and other pulmonary problems. Of the people who survive, many fail to return to independent living.

To alert the thousands of women who are ignorant of their possibly worsening physical condition, the American Association of Retired Persons is making a special effort to help Americans learn about osteoporosis; what it is, who is most likely to have the disease, how it can be diagnosed earlier, what is the most effective treatment; and most importantly, how it can be prevented.

The American Association of Retired Persons believes society has an obligation to provide high quality health care at a fair price. Therefore, in 1984, AARP launched a national campaign to save and strengthen our Nation's health care system. The campaign is called Healthy US and seeks to cut the cost and keep the care in our health care system.

Osteoporosis awareness was selected as the health care campaign action step for the month of May 1985. Accordingly, AARP actively supported Congresswoman Snowe's resolution to declare a week in May 1986 as National Osteoporosis Week. We are supporting a similar resolution by the Congresswoman this year.

To promote the prevention and treatment of osteoporosis, AARP has launched a national education campaign. The campaign activities include the dissemination of a public service announcement about the problem of osteoporosis. The distribution of an educational poster with its accompanying calcium cookbook to help women better understand the disease; its risk factors, diagnosis, treatment, and prevention.

Sponsorship of educational activities using these materials by AARP chapters and units to help older persons learn how to recognize the symptoms and ascertain their risk of developing the condition. Advocacy of declarations for local or State osteoporosis awareness day or week; exhibits at health fairs, cooking contests, featuring foods high in calcium and vitamin D and bone and muscle-building exercise classes.

As a result of these efforts, public service announcements have been aired in 224 media markets. Now this means over 400 million persons; 200,000 posters and cookbooks have been distributed and hundreds of educational programs have been held.

We are encouraging members to ask their physicians more about osteoporosis in an effort to encourage health care professionals to respond to consumer needs for information and guidance. We also believe that it is of utmost importance to help younger women understand how to prevent osteoporosis. Therefore, we are distribut-

ing the poster and cookbook sections to women's organizations, health organizations, health providers, health fairs, and conferences in an effort to reach all women.

The American Association of Retired Persons has two important messages to send through its Osteoporosis Awareness Program. The first message is for older women who many have the disease and not even know it. This message emphasizes early detection, lifestyle management for the patient. The second message is for younger women, and emphasizes how relatively simple changes in one's lifestyle can prevent the disease.

You are probably asking yourself a few questions: Do I have osteoporosis? What can do if I already have it?

Today you have heard a great deal about osteoporosis. We commend you for your work in finding out more about the disease. You of the Congress of the United States are in a position to launch a major public health education campaign on osteoporosis. I personally speak for the American Association of Retired Persons in support of such an endeavor. Thank you.

[The prepared statement of Mrs. Bennett follows:]

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF RETIRED PERSONS, PRESENTED BY MRS. JEAN BENNETT, AARP HEALTH ADVOCACY SERVICES

On behalf of the American Association of Retired Persons (AARP), thank you for this opportunity to highlight AARP's educational activities relating to the prevention, diagnosis and treatment of illnesses prevalent to mid-life and older women. My name is Jean Bennett and I am a volunteer in AARP's Health Advocacy Services program. AARP is the nation's largest organization of older Americans with a membership of nearly 22 million older persons.

AARP has made a strong commitment to mid-life and older women's health issues. Under the aegis of AARP's Health Care Campaign and Women's Initiative, AARP is active in numerous research, education and advocacy efforts. We have developed and distributed slide/tape programs and brochures on a variety of health issues. Late in 1985, AARP published a study delineating the extent of older women's dependency on Medicare to finance their health care. A companion study on Medicaid dependency will be released in 1986. Today, I would like to describe AARP's national educational campaign on the prevention and treatment of osteoporosis, a disease of particular interest to this task force. To complement private sector actions such as ours, AARP urges that Congress launch a major public health campaign on this issue.

AARP'S EDUCATIONAL CAMPAIGN ON OSTEOPOROSIS

Until recently, osteoporosis was rarely heard of among the general public and greatly misunderstood. Many people could barely pronounce the word. It was generally thought that our grandmothers naturally developed brittle bones as they grew older. Osteoporosis is indeed a gradual thinning of the bones, which makes them susceptible to fractures. But the condition can be diagnosed much earlier than it usually is and it can be prevented and treated. Most common to white or Asian women over 45, osteoporosis poses a serious threat to one-fourth of women over 40 years of age, amounting to 15-20 million older Americans. Many people are shocked to learn that, in the U.S., the disease costs an estimated $6 billion in health care expenditures, annually. Many older women are unaware of this major public health problem. Then, as they reach the age when they are likely to develop the condition, they are frightened to learn that the disease can be fatal when debilitating hip fractures leave a person bedridden. The resulting isolation, depression and malnutrition can end in death. Mortality during the year following a hip fracture may be as high as 15-30 percent in the U.S., usually caused by such complications as pneumonia and pulmonary emboli. Of the people who survive, many fail to return to independent living.

To alert the thousands of women who are ignorant of their possibly worsening physical condition, the American Association of Retired Persons is making a special effort to help Americans learn about osteoporosis—what it is; who is most likely to

have the disease; how it can be diagnosed earlier; what is the most effective treatment and, most importantly, how it can be prevented.

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The dissemination of a public service announcement about the problem of osteoporosis.

The distribution of an educational poster with its accompanying "Calcium Cookbook" to help women better understand the disease osteoporosis—its risk factors, diagnosis, treatment and prevention.

Sponsorship of educational activities, using these materials, by AARP chapters and units to help older persons learn how to recognize the symptoms of osteoporosis and ascertain their risk of developing the condition.

Advocacy of declarations for local or state "Osteoporosis Awareness Day (or Week)".

Osteoporosis exhibits at health fairs; and

Cooking contests, featuring foods high in calcium and Vitamin D, and bone and muscle-building exercise classes.

As a result of these efforts, public service announcements have been aired in 224 media markets, 200,000 posters and cookbooks have been distributed, and hundreds of educational programs have been held. We are encouraging members to ask their physicians more about osteoporosis in an effort to encourage health care professionals to respond to consumer needs for information and guidance. We also believe that it is of utmost importance to help younger women understand how to prevent osteoporosis. Therefore, we are distributing the poster and cookbook to women's organizations, health organizations, health providers, health fairs and conferences in an effort to reach all women.

The American Association of Retired Persons has two important messages to send through its osteoporosis awareness program. The first message is for older women who may have osteoporosis and not even know it. This message emphasizes early detection of osteoporosis and lifesytle management for the osteoporotic patient. The second message is for younger women as well and emphasizes how relatively simple changes in one's lifestyle can help prevent osteoporosis.

First, our message regarding early detection of osteoporosis. We begin by alerting our membership as to which people are most likely to develop osteoporosis. Women of northern European or Asian descent, who are thin, smoke cigarettes, or have relatives with the disease, are the most likely candidates. We encourage these women particularly to ask their doctor about tests for diagnosing osteoporosis early.

Unfortunately, osteoporosis is hard to detect because the disorder has so few symptoms. X-rays do not reveal bone loss until there is approximately a 30 percent decrease in bone density. In recent years, more sensitive diagnostic procedures have been developed, such as absorptiometry, bone biopsy, and laboratory testing. These methods are relatively expensive, however, and limited to major medical centers. I believe that it is very important that these screening methods become more readily available. I would recommend that regular bone scanning be started at about age 45, as a method for early diagnosis.

We also suggest that women keep careful records of any changes in their height. Losing several inches in height, especially when this loss of height is accompanied by changes in posture and back pain, is an outward sign of the spinal fractures characteristic of osteoporosis.

Once osteoporosis is diagnosed, it is important to minimize the chances of breaking bones. Therefore, in addition to stressing the importance of early diagnosis, our message to older women also suggests a lifestyle management plan to eliminate unnecessary hazards which might lead to accidents and broken bones. We suggest that people take the following precautions: (1) remove all loose wires, cords, and throw rugs; (2) install safety rails in bathrooms and along stairs; (3) minimize clutter; (4) make sure all stairways are well lit; (5) wear sturdy, rubber-soled shoes; (6) avoid icy or highly polished surfaces; (7) turn on the lights if you get up in the middle of the

night; and (8) monitor, with your doctor, the use of drugs that cause sleepiness or dizziness.

As another precaution, we suggest that older women, and particularly osteoporotic patients, learn to sit and move in a way which avoids putting too much stress on the spine. Older women tend to have sedentary habits and often relax in an easy chair or bed propped up with pillows. The aggravates osteoporosis. Instruction in body mechanics, posture and back-strengthening exercises will help these women to stand straight, sit straight and lie straight, thus relieving pressure on the spine.

There is considerable controversy regarding the various treatment methods now available for osteoporotic patients. We encourage women to evaluate the risks and benefits of each therapy thoroughly with her physician. Estrogen replacement therapy is one treatment method which is controversial but is known to prevent approximately 90% of vertabral deformations. In addition to effecting bone metabolic processes, estrogen enhances calcium absorption and lessens the excretion of calcium. When amounts of this hormone are decreased at menopause, not only is less calcium absorbed but more of it is excreted, accelerating bone loss. Some physicians are reluctant to prescribe estrogen because it has been associated with adverse side effects, such as endometrial cancer. Skin patches and other advanced methods of administering estrogen, possibly combining doses with progesterone, may eliminate many of these risks, however.

Sodium flouride treatment is another controversial method which increases bone mass. But its use is still experimental and may cause harmful side effects. The new bone may not be stronger but may be more brittle and thus weaker.

Now to the second message of AARP's osteoporosis awareness program. It is important to alert everyone to the fact that all people begin to lose some bone as early as age 35. In fact, younger women who have had their ovaries removed, and therefore have less estrogen in their system, may develop osteoporosis long before they reach old age. Therefore, everyone should be concerned about bone-strengthening exercise and calcium intake, sufficient to build the maximum bone mass during the bone-formation years and assure greater bone mass during the later years.

Once again, the key to preventing osteoporosis is to maximize peak bone mass and to minimize the rate of bone loss in later years. By making the necessary changes in one's diet and exercise patterns, everyone can start a lifelong prevention program. But it's more complicated than merely drinking more milk and doing a few jumping jacks. The following suggestions for making changes in one's diet and exercise patterns apply to older people as well as younger, with variations as described.

To maintain the ideal level of calcium in the body and maximize peak bone mass, it has been generally agreed that the premenopausal woman should take about 1000 mg. of calcium per day and the menopausal and post-menopausal women should take 1500 mg. per day. Although it may be difficult to get these amounts of calcium through diet alone, women should be taught which foods have the highest levels of calcium. Dairy products are a food source of calcium, since they often have both vitamin D and lactose which aid the absorption of calcium. But many women think milk is "just for kids" or, worried about weight, they have stopped drinking milk. These women should be encouraged to drink skim milk and eat low-fat yogurt. They should also be encouraged to eat dark green leafy vegetables, sardines and salmon with edible bones, and other calcium-rich foods.

Increasing intake of calcium through one's diet alone may not be enough, however, since the average American diet contains only 400-500 mg. of calcium per day. Therefore some women, and particularly older women, may need to take calcium supplements. There is controversy over what is the best source of calcium supplements, however, and women should be informed of the various options, and their pros and cons. They should learn to verify whether a calcium compound provides adequate elemental calcium. They should know that persons with chronic renal disease should limit their calcium intake. They should know that even though some women are getting their calcium supplement from antacids composed of calcium carbonate, antacids may have a short-term effect of reducing stomach acidity, but a long-term effect of increasing it. Further research needs to be done to determine whether these antacids make good calcium supplements. Women should be aware that aluminum-containing antacids, can cause losses of calcium from the body and are not a source of calcium.

Women should know that vitamin D helps the body absorb calcium. Younger women who spend time in the sunshine, usually get the RDA of 400 IUs of vitamin D per day with no problem. But they should know that more than 600-800 IUs of vitamin D per day can be harmful. Older women, especially those who, because they are housebound or confined to an institution, have a low exposure to sunlight, may have a vitamin D deficiency. In addition, inadequate conversion of vitamin D to cal-

citriol, an active metabolite of vitamin D necessary for calcium absorption, is thought to be responsible for the decline in calcium absorption with aging.

As you can see, the prevention of osteoporosis through changes in one's diet is not as simple as it appears. The need for good educational materials and a public health education program on osteoporosis is evident as we review the complexities of the issue. In addition, we must teach women about the possibility that smoking and alcohol consumption may increase the possibility of osteoporosis.

Modification of one's diet is not the only preventive measure; it is but one aspect of a total approach to maximizing bone mass and minimizing bone loss. Regular, moderate, weight-bearing exercise has been shown to stimulate the formation of new bone and may also decrease the likelihood of a fall or other injury by strengthening supporting muscles and improving balance and agility. Women need to be instructed that bones require stress against gravity. Therefore, activities that place moderate stress on the spine and long bones of the body, such as walking, jogging, dancing, and cycling, are good. Although swimming is an excellent cardiovascular exercise, it does not promote bone growth because it is not a weight-bearing activity.

CONCLUSION

I have outlined for you the most important facts about osteoporosis which I believe women urgently need to know so that they can make the necessary changes in their daily habits before it is too late. Though you may not have heard of osteoporosis before, it *is* one of the most serious health issues facing older Americans today. Until people know more about the disorder and the steps they can take to prevent it, osteoporosis will continue to cause physical and emotional pain to millions of women and men. Osteoporosis will cause debilitating fractures and will result in the deaths of thousands of people each year from fracture complications.

Life expectancy for women has increased. After menopause, a major part of a woman's adult life still lies ahead. If we are to help these women lead an active life, we must encourage additional research on the metabolism of bone, the definition of risk factors, and the development of safe, effective, low-cost strategies for prevention and treatment. There are few hard and fast rules for dealing with osteoporosis and too many questions to be answered.

You're probably asking yourself a few questions—"Do I have osteoporosis?" "Could I get it?" "What can I do if I already have it?" We, who have spoken today, have given you some of the answers. It is now up to you to find out more, to discuss osteoporosis with your doctor, and to "spread the word" to other people who might be at risk. You of the Congress of the United States are in a position to launch a major public health education campaign on osteoporosis. I, personally, speak for the American Association of Retired Persons in support of such an endeavor.

Thank you.

Ms. OAKAR. Thank you very much. Excellent testimony.

Dr. Deren, we would like to hear from you.

STATEMENT OF JANE M. DEREN, PH.D.

Ms. DEREN. I am going to play a tape. It's only a minute. It's grassroots women, and I think their voices are important here.

Thank you for inviting the National Council of Aging to this hearing. As the director of women's programs, I welcome this opportunity to talk about our recent work with grassroots woman, and our recently deceased president, Anna Brown from Cleveland would be very happy, because she was certainly a champion of elderly woman.

We know what has been said here, that the majority of the elderly are women, and I am sure you all know the distressing situation that they are in today; 44 percent live on $4,500 or less; one-fourth of that limited income goes toward health care, even though they have Medicare benefits. We know that they have more chronic illnesses than men, they have more acute and life-threatening conditions, more physicians' visits, more hospital days, and a much higher rate of institutionalization in nursing homes than men do.

Those statistics don't even tell the whole story because a lot of women aren't getting medical care, because of financial reasons or inadequate medical care available. We know that the population is growing rapidly. By the turn of the century, in 15 years, we will have 19 million older women. It has been said that we are looking at the graying of the feminization of poverty over the next coming decades in this country.

Unless something is done, we are going to have a sicker, poorer, more dependent elderly female population in this country in the 21st century. Because we can't deal with the health problems of older women without focusing on the roots of these problems, we believe that preventive programs and education for aging are really critical for midlife women.

At NCOA we have recently developed and tested a program called Facing Our Future which is designed for midlife low-income and working-class women, to teach them about health, finances, education, employment, emotional issues that they will be dealing with as they age.

In doing that, we interviewed women all over the United States. We did oral interviews. We talked to a woman from the Black Womens Health Project in Philadelphia, and in Virginia; we talked to women at the Congress of Neighborhood Women in Brooklyn; Southeast Women working together in Chicago, IL; we talked to women from Portland, OR, California, Pennsylvania—a whole range of low-income and working-class women.

I think their views on health and health care are very important, and I would like to play just a very brief but representative sampling of their voices and their concerns.

[Tape being played.]

Voice: * * * ovarian cyst, and I let it go so long that it's 10 inches by 10 inches by the time I decided to go in and have it taken out. So, and then I was afraid. You know, I knew something was happening to me, but I didn't know what, and I was afraid to go and find out what it was, because I had to—I always worked, and when I worked, if I was sick, I couldn't work any longer, so therefore I kept putting it off: I'd say "No, I'll go in tomorrow." A woman, the first thing she thinks of right away is a tumor, and she is frightened.

Voice: My mother was the kind of woman who took care of all the kids in the neighborhood; she took care of the kids' parents in the neighborhood when they were having marital problems. She took care of us, she worried about my brother's marriage, about my marriage, and all this time she never worried about herself. My father died and left her a very young widow, so she never had time to be sick. I am sure she felt bad a lot, but like a lot of black women, she didn't feel bad enough. She didn't feel bad enough to go to the doctor or go to bed or in some instances, even to get her medication refilled because, "If you don't take the pills then maybe you're not sick somehow," was her attitude.

She had a stomach condition and she was feeling bad, so she took aspirin. The aspirin ate her stomach lining, and she died from internal hemorrhaging. With black women particularly, I think we don't go to see a doctor unless we really have to. We will take our children and we will encourage our mate or a friend to go to the doctor, but we ourselves would never go. We don't take time for that kind of thing. Consequently, we have so many chronic ailments that started years before they were ever discovered, and then by the time we are 50 or 60, we've had these diseases, we've had these conditions so long but we've never allowed ourselves to even think about them.

Voice: And only in recent years it will be kind of with more of a health matter, you know where you are pro-active about your health. I certainly have made some screwy choices about mine. You know, I am overweight, and I smoke, so why I do what I do I don't know, but I find myself thinking more and more of trying to set goals to stay healthy.

Women's health care in general I think has been terribly neglected. You know, from having babies to getting older and not being informed about what happens to our bodies because of hormonal changes during menopause. I don't think women are well informed. Where women are becoming informed is groups of women working together. That is where the impetus for change in women's health care is coming. It is not coming from the medical profession.

Voice: I feel the medical profession is male-dominated and hasn't addressed women seriously as they should. They address our reproductive years and that's about it. And I feel that too often when women go to a doctor, they are just given valium or still kind of back in the old Victorian—you know, it's hysteria or it's premenstrual or it's change of life.

Voice: I don't know, I'm going to tell you one thing: Once you go to the doctor and you tell the doctor your age, right away they connect that with your menopause. And they give you pills and pills and they don't do nothing else.

Voice: I think that there's also not enough education outside there about what growing older really is and what it is about. When you're younger, you start thinking about growing older in a different way. None of us were ever taught to grow old. There was never anyone to teach those things to us.

Ms. DEREN. I just want to give an overview of what we heard throughout the country, and the themes really were articulated in those few selections. First of all, there isn't enough information getting out there. The information that is put out is not always in an accessible form, especially to low-income and working class women. Language is a barrier, not only in terms of Hispanic women of course not speaking English, but just in the terminology used, the structures of getting it out.

What a lot of women apparently are doing, they will read something in Family Circle, they will hear something on the radio or TV, but they are very confused and they don't have criteria for making judgments about the information or making judgments about treatment. They are hearing things, but again some of the sources are reliable and some of them aren't and they really don't know how to judge between those.

The other thing that we heard that I think is very crucial here is that even when information gets out, women, because of conditioning and circumstances, do not always act on it. Jackie Richmand, the black woman, was talking about her mother, who was conditioned to take care of everybody else, but did not make her own health a priority, and this is certainly true in this country with women over 40 today, I think.

That age group—we were talking about stress before—is perhaps the most stress today. They have teenage and adult children at home; then may be also caretaking for elderly parents, they are probably back in the workforce now in low-paying jobs. It is a very stressful, demanding time of life. There is also a high rate of divorce now in those middle years, and the age of widowhood is younger and younger; it's 56 now.

So these are very, very stressful times and for women who are not used to making themselves a priority; there is a problem with conditioning. There is a problem with circumstances. One woman said, "I couldn't be sick because I can't lose the time on the job."

The majority of women over 40 in this country are in low-paying, unprofessional jobs. A lot of those jobs do not have health insurance as a benefit, or have very inadequate health insurance plans; a lot of them don't have disability provisions, so we have to remember that economics impact on health. If you've had a lack of education, you have only access to poorly paying jobs, you've been in and

out of the workforce to raise your children, you've got a lot of family stress, you are going to have very limited financial resources again at that midperiod of life when the problems really develop.

The other problem I think we should look at is that even though some women do have health insurance, there are at least 15 million women in this country under 65 who do not have any kind of health coverage, and that is really a great scandal, and we should really look at that.

The last major issue that was articulated in all of our interviews was the lack of sensitivity on the part of health professionals. Many women, and I have heard so many times it is almost a cliche, but it is just true that they feel that their doctors do not listen to them, do not talk to them. The Hispanic woman you heard was saying her doctor gave her pills. We said, do you know what the pills are? She didn't know; he didn't tell her. "Do you know what the side effects of the pills are?" She didn't know, he didn't tell her.

We asked her, was she taking them regularly? She said well, when she didn't feel well she took them. We said, did he explain that they should have been taken on a regular basis? And he didn't tell her. We've heard these kinds of things over and over. As the woman said, "it's 'Victorian'; they think you are hysterical; they give you Valium."

I think what is very important here is that there are more programs like the ones that we have developed to reach women at midlife. I think that they have to be tailored and made very accessible and be given through local community groups; we are doing this through churches, through unions, at worksites, through schools in the neighborhoods because we have found a lot of these women—there may be very good programs put on by some of the health projects in various cities, but these women don't leave their neighborhoods or their own little group to go and seek these programs. You've got to go to the community or the worksite or a familiar place like their church to get them involved.

Besides providing information, we really have to have forums where women can examine their own attitudes toward taking care of themselves, and their conditioning. We have to help them develop support networks, so as the woman said, she was afraid when she had this tumor and she didn't go for help until it was really late. Women need support networks to help them get through these difficult times, and to help them also get involved in preventive care, and to maintain that.

Again, when you are under a lot of stress, you don't have a lot of time and money; proper nutrition and exercise is a luxury for a lot of women. The access is a critical thing, too.

Equally important is that health professionals have additions to their curricula. I think emphasis on preventive care; women's health issues, gerentology and professional patient relations is very needed.

At the same time, policymakers must continue to examine the health and the related financial problems that midlife and older women face, as we have begun to do here today. I think there is a complex of issues: Income, gender, age, class, race and ethnicity all

impact on our state of health, the kind of treatment we seek and the health care that is available to us.

We urge that you continue to examine the health needs of mid-life and older women, and to take an aggressive stand to develop policies and programs that this large segment of our population, so that this large segment of our population are insured the right to proper health care. Thank you.

[The prepared statement of Ms. Deren follows:]

PREPARED STATEMENT OF THE NATIONAL COUNCIL ON THE AGING, INC., JANE DEREN, PH.D., PROJECT DIRECTOR, WOMEN'S PROGRAMS

MADAME CHAIR, MEMBERS OF THE COMMITTEE, THANK YOU FOR INVITING THE NATIONAL COUNCIL ON THE AGING TO JOIN IN TODAY'S HEARING. AS THE COUNCIL'S DIRECTOR OF WOMEN'S PROGRAMS, I WELCOME THE OPPORTUNITY TO SHARE WITH YOU OUR RECENT WORK WITH GRASS-ROOTS WOMEN ACROSS THE UNITED STATES. NCOA HAS LONG BEEN INVOLVED IN RESEARCH AND PROGRAM DEVELOPMENT IN ALL AREAS THAT IMPACT ON THE HEALTH AND ECONOMIC SECURITY OF OLDER AMERICANS, AND WE BELIEVE THAT OLDER WOMEN AND HEALTH IS A TOPIC OF PRIMARY IMPORTANCE.

THE MAJORITY OF OLDER AMERICANS ARE, AND WILL CONTINUE TO BE, WOMEN. THAT MAJORITY GROWS GREATER AT EACH SUCCESSIVE AGE LEVEL. IN 1983, THERE WERE 4 MILLION WOMEN IN THE 80 AND OVER CATEGORY AND ONLY 1.9 MILLION MEN. YOU KNOW OF THE DISTRESSING SITUATION AMONG OLDER WOMEN IN THIS COUNTRY; 6.3 MILLION WOMEN OVER 65 YEARS OLD ARE LIVING ALONE. FORTY-FOUR PERCENT OF OLDER WOMEN HAVE INCOMES OF LESS THAN $4,500 A YEAR. THEY SPEND ONE-FOURTH OF THEIR LIMITED INCOME ON HEALTH CARE DESPITE MEDICARE BENEFITS. OLDER WOMEN HAVE PROPORTIONATELY HIGHER RATES OF CHRONIC ILLNESS THAN OLDER MEN. THEY HAVE MORE ACUTE CONDITIONS, MORE PHYSICIAN VISITS, MORE HOSPITAL DAYS, AND A MUCH HIGHER RATE OF INSTITUTIONALIZATION IN NURSING HOMES THAN MEN. BECAUSE OF WIDESPREAD FINANCIAL PROBLEMS, AND UNAVAILABLE OR INADEQUATE HEALTH SERVICES, MANY ARE NOT RECEIVING THE MEDICAL CARE THEY NEED.

WITH A RAPIDLY GROWING ELDERLY POPULATION, THERE WILL BE ALMOST 19 MILLION WOMEN OVER 65 BY THE TURN OF THE CENTURY. THE SITUATION WILL ONLY GET WORSE IN THE COMING DECADES. IT HAS BEEN SAID THAT WE ARE FACING THE "GREYING OF THE FEMINIZATION OF

POVERTY": THIS MEANS A LARGER, SICKER, MORE DEPENDENT ELDERLY FEMALE POPULATION THAT WILL OVERWHELM ALREADY LIMITED SOCIAL SERVICES. THERE IS THE POTENTIAL OF A VERY REAL SOCIAL CATASTROPHE AHEAD.

BECAUSE YOU CANNOT DEAL WITH HEALTH PROBLEMS OF OLDER WOMEN WITHOUT FOCUSING ON THE ROOTS OF THESE PROBLEMS, PREVENTIVE MEASURES AND EDUCATION FOR AGING ARE CRITICAL FOR THE MILLIONS OF MID-LIFE WOMEN WHO WILL BE THE NEXT GENERATIONS OF OLDER ADULTS IN THIS COUNTRY. FACING OUR FUTURE IS A NEW WORKSHOP SERIES DEVELOPED BY NCOA, WITH FUNDING FROM THE U.S. DEPARTMENT OF EDUCATION'S FUND FOR THE IMPROVEMENT OF POSTSECONDARY EDUCATION AND FROM PRIVATE SOURCES, TO PROVIDE THIS KIND OF EDUCATION. IN CREATING FACING OUR FUTURE, WHICH IS TAILORED TO LOW AND MIDDLE INCOME NON-PROFESSIONAL WOMEN -- HOMEMAKERS, OFFICE AND FACTORY WORKERS, RETAIL CLERKS, ETC. -- WE TAPED INTERVIEWS WITH WOMEN ALL OVER THE U.S. THEIR VIEWS ON HEALTH AND HEALTH CARE ARE IMPORTANT TO CONSIDER WHEN DEVELOPING POLICY AND LEGISLATION. I WOULD LIKE YOU TO HEAR A REPRESENTATIVE SAMPLING OF THEIR VOICES AND THEIR CONCERNS. THESE WOMEN RANGE IN AGE FROM 40 TO 60 AND ARE FROM GROUPS SUCH AS THE CONGRESS OF NEIGHBORHOOD WOMEN, IN BROOKLYN, NEW YORK; THE BLACK WOMEN'S HEALTH PROJECT, VIRGINIA; SOUTHWEST WOMEN WORKING TOGETHER, CHICAGO, AND FROM WHITE ETHNIC, HISPANIC AND LACK NEIGHBORHOODS IN CALIFORNIA, MICHIGAN AND PENNSYLVANIA.

(TAPE)

THE THEMES ARTICULATED IN THESE CONVERSATIONS REOCCURED IN A GREAT MANY OF THE INTERVIEWS WE CONDUCTED AROUND THE COUNTRY. MOST WOMEN AGREE THAT NOT ENOUGH INFORMATION IS, IN AN ACCESSIBLE FORM, EASILY AVAILABLE ON FEMALE HEALTH CONCERNS. MANY HAD CONFUSION ABOUT CONFLICTING INFORMATION AND LACKED CRITERIA TO WEIGH DIFFERENT ALTERNATIVES IN POSSIBLE TREATMENT.

AS WE HEARD ON THE TAPE, EVEN IF WOMEN DO HAVE ADEQUATE INFORMATION, CIRCUMSTANCES AND CONDITIONING OFTEN INHIBIT THEM FROM SEEKING TREATMENT. ONE WOMAN SPOKE OF HER MOTHER, WHO WAS CARETAKER FOR AN EXTENDED FAMILY AND FOR FRIENDS, BUT DID NOT MAKE HER OWN HEALTH A PRIORITY; THIS IS CERTAINLY TRUE OF MANY WOMEN OVER 40 TODAY. THE DEMANDS OF TEENAGE AND ADULT CHILDREN STILL AT HOME, OLDER PARENTS WHO NEED CARETAKING, FAMILY RESPONSIBILITIES COMPOUNDED MORE AND MORE WITH OUTSIDE EMPLOYMENT, MAKE IT VERY DIFFICULT FOR MATURE WOMEN CONDITIONED TO SERVE OTHERS FIRST TO DEVELOP AND MAINTAIN A COMMITTMENT TO THEIR OWN PHYSICAL WELL-BEING. ANOTHER FACTOR IS SIGNIFICANT HERE. ONE VOICE SPOKE OF FEAR AND DENIAL WHEN SHE SUSPECTED SHE HAD A SERIOUS GYNECOLOGICAL PROBLEM. THIS MAY BE AN EMOTIONAL RESPONSE, BUT THERE IS AN ECONOMIC BASIS FOR IT.

A CENTRAL ISSUE WAS ARTICULATED BY THIS WOMAN WHEN SHE SAID SHE "COULDN'T BE SICK", BECAUSE SHE HAD TO KEEP WORKING AND COULD NOT AFFORD TO BE OUT OF WORK FOR AN EXTENDED PERIOD. ECONOMICS, OF COURSE, IMPACT HEALTH. LACK OF EQUITABLE EDUCATION AND TRAINING, LIMITED JOB OPPORTUNITIES, YEARS OUT OF THE WORK FORCE TO REAR CHILDREN, THE HIGH RATE OF MID-LIFE DIVORCE AND THE EARLY

AVERAGE AGE OF WIDOWHOOD (56) ALL ADD UP TO LIMITED FINANCIAL RESOURCES AT AN EXTREMELY DEMANDING AND STRESSFUL TIME OF LIFE.

SINCE THE MAJORITY OF WORKING WOMEN OVER 40 ARE CONCENTRATED IN LOW-PAYING JOBS, MANY WITHOUT BENEFITS SUCH AS HEALTH INSURANCE AND ADEQUATE DISABILITY PROVISIONS, THEY OFTEN IGNORE SYMPTOMS THAT SHOULD BE TREATED EARLY. WE ALSO KNOW THAT WITH LITTLE TIME AND MONEY AVAILABLE, PREVENTIVE HEALTH MEASURES, SUCH AS EXERCISE AND PROPER NUTRITION, OFTEN BECOME A LUXURY FOR LOW INCOME AND WORKING CLASS WOMEN. FOR THOSE WHO ARE INSURED, HEALTH COVERAGE IS USUALLY STRUCTURED TO DEAL WITH ACUTE PROBLEMS, NOT TO PROVIDE PREVENTIVE CARE. A GREAT SCANDAL IN THIS COUNTRY IS THAT AT LEAST 15 MILLION WOMEN UNDER AGE 65 DO NOT HAVE HEALTH INSURANCE. OUR INFORMAL POLL TURNED UP A DISTRESSING LACK OF AWARENESS ABOUT THE IMPORTANCE OF HAVING HEALTH INSURANCE IN A WOMEN'S OWN NAME (DIVORCE OR DEATH OF SPOUSE LEAVE TOO MANY WOMEN WITH NO COVERAGE), AND A LACK OF AWARENESS OF LIMITATIONS IN HEALTH COVERAGE.

THE FINAL MAJOR ISSUE REPEATED OVER AND OVER AGAIN IN OUR DIALOGUES WAS A LACK OF SENSITIVITY ON THE PART OF MEDICAL PROFESSIONALS. THE WOMEN YOU HAVE HEARD ON THE TAPE SPEAKING ABOUT DOCTORS' LACK OF CONCERN FOR MATURE WOMEN'S HEALTH PROBLEMS IS VERY REPRESENTATIVE OF THE POPULATION WE HAVE BEEN WORKING WITH. WHERE CHANGE HAS COME, AS IT WAS POINTED OUT, WAS FROM LOCAL WOMEN'S HEALTH CENTERS AND GROUPS SUCH AS THE BLACK WOMEN'S HEALTH PROJECT. BUT WE HAVE TO REMEMBER THAT A MAJORITY OF MIDDLE-AGED LOW-INCOME AND WORKING-CLASS WOMEN DEAL ONLY WITH NEIGHBORHOOD

PHYSICIANS, LOCAL CLINICS OR, INCREASINGLY HEALTH MAINTENANCE ORGANIZATIONS.

GIVEN THE PROBLEMS ARTICULATED BY LOW-INCOME AND WORKING-CLASS WOMEN OVER 40, IT IS OBVIOUS THAT A DUAL AGENDA IS NECESSARY TO INSURE HEALTHIER, LESS DEPENDENT GENERATIONS OF ELDERLY CITIZENS. FIRST, PROGRAMS SHOULD BE DEVELOPED THAT ARE ACCESSIBLE TO THESE WOMEN AS WELL AS TO MIDDLE-CLASS, PROFESSIONAL POPULATIONS. SUCH PROGRAMS SHOULD PROVIDE WOMEN WITH UP-TO-DATE INFORMATION ON HEALTH CONCERNS AND ALSO GIVE THEM CRITERIA FOR JUDGING INFORMATION THEY RECEIVE FROM OTHER SOURCES. SINCE INFORMATION ALONE IS NOT THE ANSWER, WOMEN ALSO NEED A FORUM WHERE THEY CAN EXAMINE THEIR ATTITUDES AND THE CONDITIONING THAT PREVENTS THEM FROM ACTING ON HEALTH PROBLEMS. THESE PROGRAMS SHOULD ALSO HELP DEVELOP NETWORKS TO PROVIDE WOMEN WITH SUPPORT TO FACE PROBLEMS EARLY, AND TO MAKE AND MAINTAIN LIFE STYLE CHANGES SO SOME PROBLEMS CAN BE COMPLETELY AVOIDED. LEARNING TO BE SMART HEALTH CARE CONSUMERS -- KNOWING HOW TO SHOP FOR THE BEST CARE AND COVERAGE POSSIBLE AND HOW TO COMMUNICATE ASSERTIVELY WITH HEALTH PROFESSIONALS -- IS CRUCIAL.

THESE ELEMENTS HAVE BEEN INCORPORATED INTO OUR <u>FACING OUR FUTURE</u> PROGRAM, WHICH IS NOW BEING OFFERED THROUGH LOCAL CHURCHES, COMMUNITY ORGANIZATIONS, THROUGH UNIONS, AT WORK SITES AND THROUGH LOCAL ADULT AND CONTINUING EDUCATION PROGRAMS. PROGRAMS DELIVERED THROUGH SUCH STRUCTURES AND ORGANIZATIONS, ONES THAT ARE FAMILIAR AND KNOWN TO NEIGHBORHOOD WOMEN, HELP PROMOTE WIDESPREAD ACCESS.

EQUALLY IMPORTANT IS EDUCATION FOR HEALTH PROFESSIONALS. ADDITIONS TO CURRICULA SHOULD INCLUDE PREVENTIVE CARE, SPECIFIC WOMEN'S HEALTH ISSUES, GERONTOLOGY AND PROFESSIONAL-PATIENT RELATIONS.

AT THE SAME TIME, POLICY MAKERS AND LEGISLATORS MUST CONTINUE TO EXAMINE HEALTH AND RELATED FINANCIAL PROBLEMS THAT MID-LIFE AND OLDER WOMEN FACE, AS WE HAVE BEGUN TO DO HERE TODAY. THERE IS A COMPLEX OF ISSUES TO BE ADDRESSED. INCOME, GENDER, AGE, CLASS, RACE AND ETHNICITY ALL IMPACT ON OUR STATE OF HEALTH, THE KIND OF TREATMENT WE SEEK, AND THE HEALTH CARE THAT IS AVAILABLE TO US.

WE ALSO URGE THAT YOU CONTINUE TO EXAMINE THE HEALTH NEEDS OF MID-LIFE AND OLDER WOMEN AND TO TAKE AN AGGRESSIVE STANCE TO DEVELOP POLICIES AND PROGRAMS SO THAT THIS LARGE SEGMENT OF OUR POPULATION ARE ENSURED THE RIGHT OF PROPER HEALTH CARE.

WE RECOGNIZE THE CURRENT CLIMATE OF BUDGET CUTBACKS DUE TO THE GRAMM-RUDMAN AMENDMENTS. BUT AMERICA WILL BE PENNY-WISE AND POUND-FOOLISH IF WE TURN AWAY FROM A CURRENT PROBLEM IN WHICH THE GROWTH PATTERN IS PAINFULLY CLEAR.

TO CONCLUDE NCOA RECOMMENDS THAT THE CONGRESS:

- ENACT AN EARNINGS SHARING PROVISION FOR THE SOCIAL SECURITY PROGRAM TO HELP PROVIDE ADEQUATE INCOME FOR OLDER WOMEN.
- DIRECT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES THROUGH THE ADMINISTRATION ON AGING TO PROMOTE PROGRAMS FOR MID-LIFE AND OLDER WOMEN ON HEALTH, FINANCES AND RELATED CONCERNS.
- DIRECT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO DEVELOP AND IMPLEMENT A PLAN

FOR INCREASING THE CONTENT OF MEDICAL AND ALLIED HEALTH EDUCATION WITH REGARD TO THE SPECIAL CONSIDERATIONS OF WOMEN'S AND GERIATRIC HEALTH CARE.

- DIRECT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO FUND AN INDEPENDENT STUDY OF THE EFFECT OF STATE IMPOSED MORATORIUMS ON THE CONSTRUCTION AND EXPANSION OF NURSING HOME FACILITIES SO WE CAN BE SURE THAT THOSE ELDERLY PERSONS, PRIMARILY FEMALE, WHO NEED TO ENTER A NURSING HOME WILL HAVE THOSE SERVICES AVAILABLE.

- ENACT PROVISIONS OF THE MEDICARE AND MEDICAID STATUTES WHICH WILL MAKE CONTINUING HOME HEALTH CARE A VIABLE ATTENATIVE TO NURSING HOME CARE.

Ms. OAKAR. Thank you very much, and I was glad in your introduction, you mentioned something that I should have mentioned, and that is that Anna Brown was such an important part of the organization and as a national president. Those of us from Cleveland were always proud of her; she was very inspiring to me when I was a city council member of Cleveland and throughout my career in Congress. We will miss her, but we have to use her wisdom, you know, to continue the struggle, I guess, to try to lick some of these problems.

Let me ask both of you: You know, I have done a lot of legislation that relates to women: Pay equity and so on. It is really difficult to get—and I do some things in pension reform, and it is very difficult to get women's organizations and others interested in older women.

How do we get younger women—both of you mentioned this at different times, indirectly. How do we get younger women interested in knowing more about what the future is going to be like if we don't do something about it? Do you have any ideas, Jean?

Ms. BENNETT. One idea that I have is to feed some information to national church groups. That information gets back to younger women. Also through other women's organizations, professional organizations, that type of thing. The feedback does get back to younger women. I know because I have experienced this.

Ms. OAKAR. Do you, when you reach out in terms of education and osteoporosis, for example, and other things that—for example, the budget. I mean, Medicare is going to just be clobbered in this budget submission. We think they're going to recommend cutting it by $50 billion over the next 5 years, in contrast to increasing Pentagon spending by about $100 billion over the next 5 years—interesting.

What do you do to—do you reach all economic groups, people of all backgrounds with your organization? My experience with the American Association of Retired People is that they're among the most sophisticated in terms of education, so you have professional people pretty much belonging to your group—I know it's not exclusive, but you are among the best educated older Americans, in the organization.

Are you able to reach out to people not quite as educated and sophisticated in terms of being able to get knowledge and so on?

Ms. BENNETT. I would like to introduce Chris McEntee. She has more experience in this field.

Ms. OAKAR. Chris, do you want to comment on that?

Ms. MCENTEE. Sure. Ms. Oakar, I guess the first thing is that with 22 million members, or almost 22 million members, you would find that our membership pretty much mirrors the population in terms of economic class, educational status and things like that, so that we do reach people with a variety of backgrounds.

The association is involved in four major initiatives right now, two of which Jean mentioned in her testimony; the women's initiative and the health care campaign, but we also have undertaken a huge minority of fares initiative to try to reach out to certain segments of the population that maybe we haven't been as successful in the past at educating, and we are working through networks, that vehicle, to reach them also.

Ms. OAKAR. That's great. Do you have any—did you want to——

Ms. BENNETT. I just want to add to that that among our education programs, we have one on the prevention of heart disease and one on hearing disorders; and this is reaching out, I think, to great segments.

Ms. OAKAR. Very important, isn't it. Do you have any suggestions, Dr. Deren, about what we do to get some of the feminist groups interested in older women issues, or any other groups that could help us a little bit?

Ms. DEREN. Well, actually, all the groups that I have talked to are interested. I think that there is a communication gap at some point. I think, I know National Organization for Women has taken up the cause of social security, and they have done a promotion around that.

Ms. OAKAR. I'm going to have to ask them, because it's my legislation if they are doing anything or not.

Ms. DEREN. Well, it's a communications gap; you should know about that, and they should be talking to you.

This is a big problem that I find among women's groups. I have talked to a lot of voluntary and professional women's groups that are more middle class professional. They are very interested and they want information in a usable, accessible way. That is the key, I think.

With the other groups of working class and low income women, I think they are interested, too, but again we need to approach them in a way that they can relate to; and it's not the same way that you relate to the NOW groups.

Ms. OAKAR. Sure.

Ms. DEREN. But I have found a lot of interest. I mean, we took this program all over; we did it with meatpackers in Cleveland and the women were just really interested and receptive, and they said we need this, nobody's giving us any of this. There isn't anyplace we can go and talk about these things. There's no forum for it.

Ms. OAKAR. I think that's really important, to infiltrate the union movement, because as prolabor as I am, it is a little devoid of women's influence in some of those groups, and yet the fastest-

growing number of jobs are service-oriented jobs which more and more women go into at a greater proportion than men.

So I think that is great if you came to Cleveland with the meatpackers.

Ms. DEREN. We have been working, too, with the Amalgamated Clothing and Textile Workers in New York. Now, their union is decreasing but they were saying in terms of population it is shifting to black and Hispanic. They asked us to translate our program, and because of lack of funds we haven't been able to yet, but they are very interested.

I think there is a communications gap. I think the interest is out there, but we've got to get it, the information in an accessible way and talk to the women.

One of the things we did in our program is we didn't have a lecture format; we had peer leaders, because anybody who has worked with working class—especially working class, not as much low-income women—but if a professional woman comes in the room who looks different and speaks different, they shut up. They're not going to talk; they're not going to expose themselves or whatever. And we found that there's a lot more honesty in the peer-led situation, so we were like really sensitive to those kinds of issues.

Ms. OAKAR. I want to thank all three of you for contributing to our panel. We have a lot more work to do, obviously, but this concludes this hearing, and we will have some other ones, in trying to do something, even though we are in this Gramm-Rudman framework which is a reality even though some of us thought it was a pretty bad idea, to say the least. I don't see why we still can't have priorities within frameworks.

So let me thank our staff director, Cathy Straggas, for the excellent work that she has done, and Karen Pollitz as well.

[Whereupon, at 12:07 p.m., the hearing was adjourned.]

APPENDIX

STATEMENT OF DAVI BIRNBAUM, NATIONAL WOMEN'S HEALTH NETWORK MIDLIFE AND OLDER WOMEN'S COMMITTEE

The National Women's Health Network is the only public interest organization which seeks through an integrated program of education, organizing, and advocacy to give women a voice in the healthcare system in the U.S.

We commend the Subcommittee on Aging for their continuing interest in osteoporosis; a condition of decreased bone mass linked to fractures and a disruption in the normal structural integrity of the skeleton. The magnitude of this condition is clear: it affects over four million women in the U.S., with more than 50,000 women dying each year as a result of fractures, while over six billion dollars are spent each year on the health care costs of osteoporosis.

Our public education and advocacy efforts on behalf of older women have included campaigns to reduce unnecessary surgery; to protect the rights of women in nursing homes; to alert health care policy makers and providers of the prevalence of heart disease in women over 55; to offer information on the preventative aspects of nutrition and exercise for combatting osteoporosis; to educate women on the natural process of aging and to counter the increasing "medicalization" of aging.

It is time to act now on ways osteoporosis can be treated, and most importantly, ways it can be prevented.

Much of the research to date has been funded by pharmaceutical companies, with other research supported by food trade associations. Each has a vested interest in promoting their product, whether it is estrogen, calcium supplements or dairy products. Independent research with osteoporotic women as its sole concern needs increased support.

Educating the public about osteoporosis must start early. School health and meal programs must incorporate the preventive aspects of nutrition and exercise into their daily agenda. In conjunction with this, family life curricula must emphasize the importance of nutrition and vigorous exercise.

Dr. B. Lawrence Riggs, medical consultant for the Mayo Clinic in Rochester, Minn., suggests that nutrition is particularly insufficient "during the adolescent years when most of adult bone mass is being laid down at a time when additional dietary calcium is needed." He states that a diet low in calcium and high in phosphates, such as that of teenage girls who drank cola beverages rather than milk, will accelerate bone loss.

Compounding these nutritional deficiencies, the sex-role stereotyping of women in the media all too often show very thin women. These images present unrealistic and often unhealthy goals for women to attain. The result is that women of all ages pursue extreme diets, many young women to the point of anorexia. Quick-weight loss plans exclude important sources of calcium such as cheese and milk because of high-fat content. Dieters are encouraged through advertisements to drink instead sugar-free colas. Such drinks contain phosphate and caffeine instead of important nutrients.

Dr. Sadja Greenwood, Medical Director of Min An Health Center and professor at the University of California Medical Center, San Francisco, explains that the obsession with being slender in our society is especially counter-productive in the second half of life when women produce less estrogen and are at a greater risk for developing osteoporosis.

The National Women's Health Network agrees with Dr. Greenwood when she states that women should be better informed of the preventitive aspects of increased calcium intake and weight-bearing exercise. Nutrition and exercise are two of the safest and most effective means of controlling osteoporosis in the opinion of Dr. Greenwood and other experts.

The idealized woman for too long also eschewed vigorous exercise and sports. The current popularity of athletics for women of all ages is to be embraced by government leaders and health care providers. Furthermore, we must be sure it becomes a permanent feature of American society.

It is important for health care providers to discuss with women the genetic, medical and personal factors which may predispose them to osteoporosis. Providers should inform their patients that genetic and medical factors include: a history of bone fractures, non-black racial background, female relatives with osteoporosis, thinness, early menopause, chronic diarrhea, kidney disease, and daily cortisone use. Other factors which may increase a woman's risk are: high alcohol use, lack of exercise, low-calcium diet and lack of Vitamin D.

Women who are in a high-risk category should carefully study the risks and benefits of any treatment prescribed by their health care provider. If using or considering using hormone therapy, women need to be informed by their health care provider that the research findings on estrogen replacement therapy are not yet complete. Research at the Mayo Clinic and the University of Massachusetts found that although estrogen replacement therapy has been shown effective in blocking accelerated bone loss, many questions still remain concerning safety. The increased risks of endometrial cancer, gall bladder disease, hypertension and other problems should not be minimized.

Further, health care providers must inform their patients of the simple ways to avoid accidents or injury. A daily living plan that eliminates hazards leading to broken bones should be incorporated into such patient education. The American Association of Retired Persons suggests the following guidelines: 1) remove all loose wires, cords and rugs; 2) install safety rails in bathrooms and along stairs; 3) minimize clutter; 4) light all stairways 5) wear sturdy rubberized soles; 6) avoid icy or highly polished surfaces; 7) turn on the lights when rising from bed at night; and 8) monitor, with your doctor drugs that cause sleepiness or dizziness.

Those providing food or food financial assistance such as Food Stamps and Meals On Wheels will have to increase the amount of calcium-rich foods such as yogurt, bok choy, and filbert nuts. They should also consider ways to teach women how to take calcium supplements. For post-menopausal women, the recommended daily intake of calcium is 1,500 mg, a level few diets can meet without supplements. Also, elderly women need to be informed of the value of a calcium-rich diet and simple ways to incorporate such foods into their every day eating patterns.

To combat osteoporosis, the federal government must try pilot projects on ways to shift teenagers' diets away from phosphate drinks towards calcium-rich foods and to validate young women's participation in sports and vigorous exercise. Similarly, projects need to be undertaken by the private and non-profit sector to urge women in their twenties to stay athletically active and to eat a 1,000 mg. of calcium a day. To keep the public alerted to the importance of osteoporosis prevention, health care providers are going to have to discuss with their women patients exercise and nutrition. To not do so, is neglect of the worst kind.

However, it is imperative that the federal government coordinate programs relevant to older women. There is no point in exhorting older women to get out and walk in the sunshine if their nearby parks are dangerous and their streets have no safe crosswalks.

It's similarly a waste of effort to suggest sturdy rubber soled shoes if all the elderly women on television and in the news wear skimpy high heels, while running shoes are only found on young athletes. It is high time that an integrated approach to address the numerous factors which affect the health of older women are examined and addressed by appropriate federal and state agencies.

While exercise is highly recommended for older women there are almost no exercise programs at health clubs or community centers geared for them. There are no regular television or radio exercise shows for them. The parks, subsidized by the elderly's taxes have no recreation equipment such as bench swings that older women would find appealing. The federal transportation office as well as the local traffic officer have not addressed the problem of the slow pedestrian and ways to make streets safer. Shopping malls have installed benches but not quiet corners so those with hearing loss might be able to converse without being assaulted by the dull roar of background noise. In too many ways, our communities have gradually changed. The result has been to increasingly isolate older people, confining them to their homes. What is needed is an approach which looks at the entire community, every aspect of daily life, from transportation to public education to community news to health care and the ways those services have shifted to primarily serve the mobile and active.

Combatting osteoporosis is indeed important. Yet while it is important for the government to fund studies on bone loss and the mechanisms affecting it, it is high time for an aggressive prevention program to begin. Such a venture by coordinated federal agencies with assistance from organizations which represent the interests of women and older Americans, such as the National Women's Health Network, Older

Women's League, Grey Panthers and other concerned citizen's groups can alert women of all ages about what they can do today on behalf of their bones. Today they can increase their calcium intake, they can increase the amount of weight-bearing exercise, and they can begin to redesign their living so these first steps become a way of life.

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